

## 2.6 3rd seminar in SKP

### 3rd Seminar for Provincial Natural Resources and Environmental Quality Management Plan in SKP

July 11, 2008  
Provincial Environmental Office in SKP  
Office of Natural Resources and Environment  
Policy and Planning (ONEP/MNRE)  
JICA Study Team  
for the Study on Supporting System for Administrations on  
Natural Resources and Environmental Management in the  
Kingdom of Thailand

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#### Agenda

- 1. Improvement of PEQMP**
  - 1. Background
  - 2. Procedure of Improvement
  - 3. Priority Setting of Issues
- 2. Details of PEQMP**
  - 1. Improvement in individual NREM sectors
  - 2. Strengthening NREM administration capabilities in SKP

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### Background

ONEP/MNRE in collaboration with JICA are conducting "the Study on Supporting System for Local Administrations on Natural Resources and Environmental Management in the Kingdom of Thailand"  
**Period of the Study :** June 2007 – July 2008  
**Objective :** To strengthen capacities of central government, provincial administration and local administrations through the formulation of the Provincial Environmental Quality Management Plan (PEQMP)  
**Pilot Area :** 2 provinces - Phra Nakhon Sri Ayutthaya (AYS) and Samut Songkhram (SKP)

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### Background (cont'd)

In 2007, Office of the Public Sector Development Commission (OPDC) in collaboration with MNRE revised key performance indicator for evaluation of administrative performance. In this regard, each province has been formulated their EQMP B.E. 2008-2011 (hereinafter called as PEQMP-KPI) and submitted them to the MNRE  
 ONEP/MNRE has been published PEQMP-KPI Manual in order to facilitate the formulation of the PEQMP-KPI for 75 provinces

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## Background (cont'd)

- MNRE by "the PEQMP-KPI Evaluation Committee" evaluated those PEQMP-KPIs and pointed out the following general inadequacies:
  1. Lack of Spatial Data or Area-Based Information hinders the clear information of critical areas
  2. Provide insufficient opportunities nor procedures for stakeholder participation
  3. PEQMP-KPI dealt only with problems solvable within a single local administration (LA) instead of addressing provincial-level issues that lead to unclear picture of NREM in the province

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## Background (cont'd)

- In 2008, MNRE requested all provinces to review and resubmitted their PEQMP-KPIs.
- The JICA Study Team collaborated with the C/P on the revision of submitted PEQMP-KPI by the 2 model provinces. As the result combined with comments from the PEQMP-KPI Evaluation Committee, **the Team completed the revised PEQMP-KPI (Third Draft) for dissemination and receive comments from various stakeholders.**

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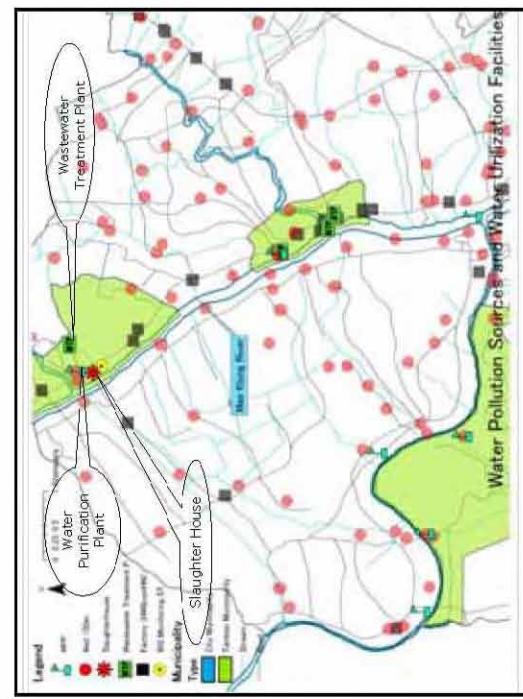
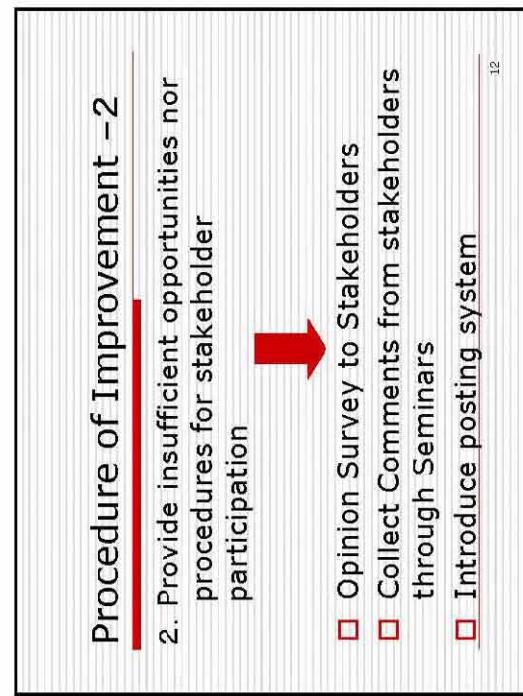
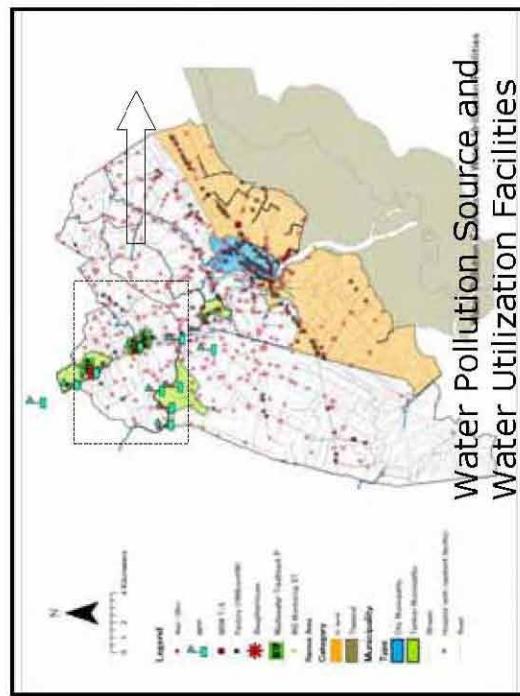
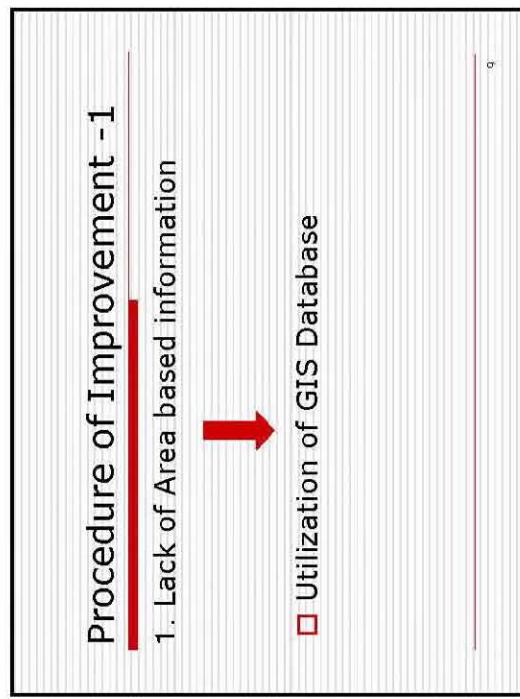
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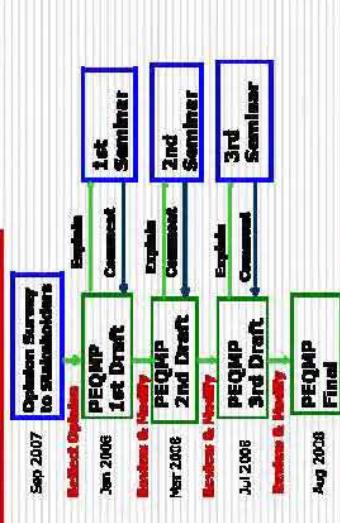
## Contents of PEQMP

- Part 1: Introduction**
- Part 2: Situation and Issues of NREM**
  - 1. Basic Data of Province
  - 2. Situation and Issue of NRE of Province
  - 3. Summary of situation and issues of NRE of Province
  - 4. Priority Setting of Issues
  - 5. SWOT Analysis
  - 6. Selection of Priority Programs
- Part 3: Details of PEQMP**
- Part 4: Annex**

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## Process of Public Participation



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## Opinion Survey



Interview with the staff members  
in charge of environmental  
administration in Orbropic of SKP.

Opinion survey with the head of  
an NGO, 'We Love Mae Klong'.  
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## Seminar



The 1st Seminar at SKP. The  
content of PEQMP was explained to  
the public, and their comments  
were reflected onto the next draft.  
A round 100 participants (LA staff  
and NGO resident  
representatives) participated in  
the 1st Seminar at SKP on January  
17th, 2008.  
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## Posting System to collect public opinion

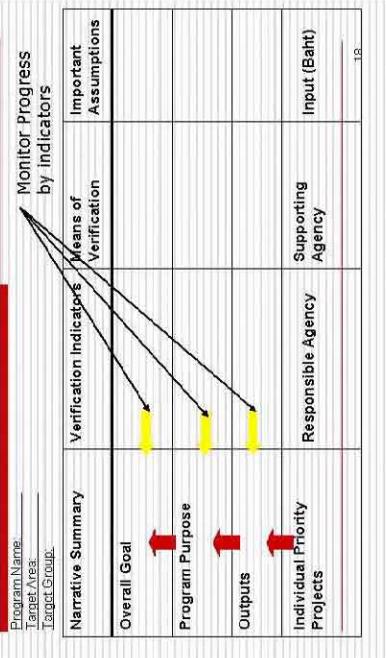


PEQMP will be open to the public for certain period in order to  
collect public opinion and reflect them to the planning.  
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### Procedure of Improvement – 3

- 3. PEQMP KPI dealt only with problems solvable within a single local administration (LA) instead of addressing provincial-level issues that lead to unclear picture of NREM in the province
- 
- Introduction of PDM
    - Make it clear for the relations between Overall Goals and Objective, Objective and Output, Output and Input
    - Priority is given to formulation of provincial master plan in priority issues which identified through opinion survey and SWOT analysis.

### Structure of PDM



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### Project Design Matrix (PDM)

- Advantage of PDM
  - It is logically explained that, in order to achieve Program Objectives, what kind of outputs will be required.
  - It is logically explained what kind of Individual Priority Projects will be required in order to realize outputs.
  - It is easy to monitor progress of each step

#### Priority Setting of Issues: Selection Process of Priority Issues and Programs

- PEQMP formulation committee meeting
  - Opinion Survey to residents, business entities, local administrations, NGOs
- 
- Selection of Priority Issues
- 
- Priority Programs on Priority Issues which should be implemented by 2011

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#### Priority Setting of Issues: Opinion Survey to the Stakeholders

##### Target Group

Target Group	Number
Local Administration	36 LA
Resident	64
Business Establishment	47
NGO	5 NGO

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#### Priority Setting of Issues: Problems of NREM

Target Group	Most Serious Problem	Reply Rate (%)	Second Most Serious Problem	Most Serious Problem	Reply Rate (%)	Reason for choice
LA	Marine/Coastal /Fishery Resources	38.9	Solid Waste Management	Solid Waste Management	27.8	•Disordered and illegal fishing methods
Resident	Marine/Coastal /Fishery Resources	25.0	Global Warming	Global Warming	23.4	•Decrease of fishery resources
Business Establishment	Marine/Coastal /Fishery Resources	25.5	Global Warming	Global Warming	17.0	•Over harvesting of Razor clams
NGO	Marine/Coastal /Fishery Resources	100.0	•Solid Waste Management	•Solid Waste Management	60.0 <sub>23</sub>	•Loss of land •Deterioration of natural environment •Coastal erosion •Too many tourists

#### Priority Setting of Issues: Reasons for Selecting Most Serious Problems

Most Serious Problem	Specific issue	Reason for choice
Marine /Coastal /Fishery Resources	•Extreme decrease of fishery resources and less income for fishermen •Extreme reduction of razor clam population •Over harvesting of Razor clams •Coastal erosion •Too many tourists	

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### Priority Setting of Issues: Reasons Selecting Second Serious Problem

Second Serious Problem	Specific Issue	Reason for choice
Solid Waste Management	<ul style="list-style-type: none"> <li>•Improper treatment of huge amount of solid waste</li> <li>•Improper management of transfer station by private company</li> <li>•Dumping waste into waterways</li> </ul>	<ul style="list-style-type: none"> <li>*Occurrence of serious environmental problem</li> <li>*Obstacles to fishery</li> </ul>
Global Warming	<ul style="list-style-type: none"> <li>•Rise in temperature</li> </ul>	<ul style="list-style-type: none"> <li>*Adverse impact on agriculture</li> <li>*Decrease of fishery resources</li> <li>*Change of season</li> <li>*Influence on health</li> </ul>
Water Quality	<ul style="list-style-type: none"> <li>•Polluted water flowing from neighbouring provinces</li> <li>•Polluted water flowing from fishery ponds</li> </ul>	<ul style="list-style-type: none"> <li>*Decrease of fishery resources</li> <li>*Adverse impact on agricultural land</li> </ul>

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### Priority Setting of Issues: Priority Examined in SWOT Analysis

- The PEQMP-KPI Formulation Committee was held at the SKP Conference Room on the **2 of July 2007** chaired by the Governor
- SWOT Analysis was conducted with **70** relevant participants directed by a moderator from **Mahidol University**
- In addition to SWOT Analysis, the priority among issues to be resolved for NREM was examined in the PEQMP-KPI Formulation Committee.

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### Priority Setting of Issues: Priority Issues on Natural Resources in SKP discussed in SWOT Analysis Meeting

Priority	Specific Problems	Suggested Preventive Measures and/or Solution	Solution for Measurement and Solution
1.	Amount of aquatic animals is decreasing	<ul style="list-style-type: none"> <li>•Build habitat for marine animals (artificial and) release fresh water aquatic animals into natural water source</li> <li>•Publish warning to fisherman to stop illegal fishery</li> <li>•Encourage people and fisherman to participate in protection of fisherman's network in the entire area</li> </ul>	<ul style="list-style-type: none"> <li>*Promote waste separation</li> <li>*Reduce waste generation</li> <li>*Increase capacity of collection and disposal</li> </ul>
2.	Deteriorated soil	<ul style="list-style-type: none"> <li>•Reduce the use of chemical fertilizers</li> <li>•Promote the use of biological/ organic fertilizers</li> <li>•Promote knowledge on soil conservation</li> </ul>	<ul style="list-style-type: none"> <li>*Construct proper wastewater treatment system for the area</li> <li>*Create awareness among residents to stop discharging waste and might soil into natural water sources</li> </ul>
3.	No waste disposal site		<ul style="list-style-type: none"> <li>*Build acceptance among local residents</li> <li>*Provide quality management by government</li> </ul>
4.	Household hazardous wastes		<ul style="list-style-type: none"> <li>*Promote waste separation</li> <li>*Provide guidelines in integrated disposal system</li> </ul>
5.	Disorderly advertising billboards		<ul style="list-style-type: none"> <li>*Strict and serious enforcement of law</li> <li>*Survey on advertising billboards in the Province</li> </ul>
6.	Noise level is above standard		<ul style="list-style-type: none"> <li>*Set measures for tourism boats to have standard engine noise levels</li> <li>*Changing tourism boat engines to models within noise standard</li> </ul>
7.	Infectious waste from hospital/clinics		<ul style="list-style-type: none"> <li>*Collect and dispose of medical waste using proper technology</li> </ul>

## Priority Setting of Issues: Examination of Priorities

- The priority issues for PEQMP (2008-2011) are issues in NREM on the provincial scale, and issues that should be dealt with by 2011.
- To solve the issues by 2011, several Priority Projects must be implemented. The Priority Projects with a common goal (i.e. solving the same priority issue) will be combined as a Priority Program.
- Priority Programs can be divided into two major categories:
  1. Improvement in individual NREM sectors
  2. Strengthening of NREM administrative capacities in SKP

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## Selection of Priority Programs (to be implemented by 2011)

- Improvement in individual NREM sectors**
  1. Program for Conservation and Rehabilitation of Aquatic Resources
  2. Program for Appropriate and Sustainable Solid Waste Management
  3. Program for Water Quality Preservation in Public Water Bodies
  4. Program for Safe and Quality Water Supply
- Strengthening NREM administration capabilities in SKP**
  1. Program to Strengthen Linkage between Central Government Agencies, Provincial Administrations and LAs
  2. Program to Strengthen NREM capacities of LAs

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## 1. Conservation and Rehabilitation of Aquatic Resources: Background

- Although the GPP for the whole Province is on the increase, the GPP for the fishery sector in 2005 (356 million Baht) has decreased to half of the 2001 figures (658 million Baht).
- All of four opinion survey target groups pointed out that the most serious problem of NREM in SKP is "Marine and coastal resources". The reasons why the respondents regarded this as the most serious problem are as follows:
  1. Extreme decrease of fishery resources and less income for fishermen
  2. Extreme reduction of razor clam population
  3. Loss of land
- Investigation revealed that there is a moderate amount of erosion, at a rate of 1 to 5 meters per year, at the northeast coast of the Gulf of Thailand

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## Agenda

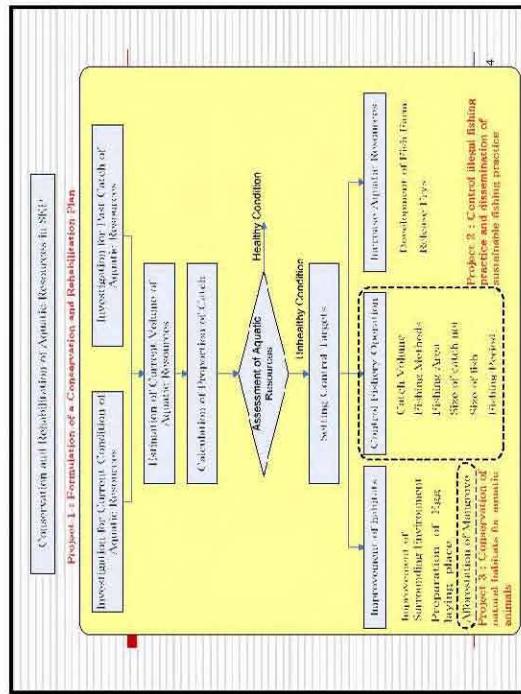
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## Basic Idea of Conservation and Rehabilitation of Aquatic Resources

- Mineral resources including minerals and petroleum are non-renewable resources, which will eventually disappear due to consumption.
- On the other hand are renewable resources, such as aquatic resources, which will keep growing, laying eggs etc., and increase in number within the aquatic environment.
- Theoretically, we can continue fishing forever without using up the resource,

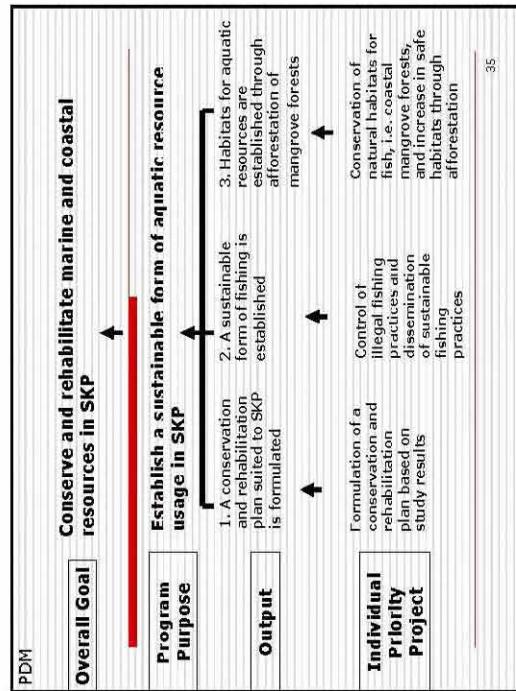
- Aquatic resources can be efficiently extracted forever, if one takes care to control excessive exploitation, the exploitation of the young of each species, and by maintaining a suitable catch amount.

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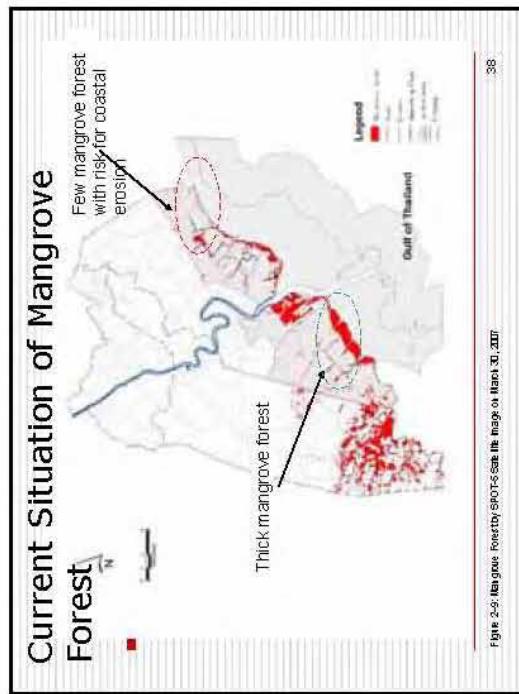
## Individual Priority Projects, Responsible Agency, Supporting Agency, and Input

Individual Priority Projects	Responsible Agency	Supporting Agency
1. Formulation of a conservation and rehabilitation plan	PFO, ORBPIJOP	PEO, MFDS7, FKU, MDRDC
2. Control illegal fishing practice and dissemination of sustainable fishing practice	PFO, LA, DOA of PA	PEO, DOA of PA
3. Conservation of natural habitats for fish, i.e. coastal mangrove forests, and increase in safe habitats through afforestation	MFDS7, PEO, LA	PEO



Monitoring Progress of Work	
Outputs	Verification Indicator
1. A conservation and rehabilitation plan suited to SKP is formulated	1.1 Fishery statistics by species/type and location 1.2 Detailed plan for conservation and rehabilitation
2. A sustainable form of fishing is established	2.1 Number of warnings and arrests over illegal fishing practices 2.2 Number of workshops and other educational events, number of participants of the same
3. Habitats for aquatic resources are established through afforestation of mangrove forests	3. Afforestation area statistics and total area statistics of mangrove forest

Progress of the work will be monitored by verification indicators.



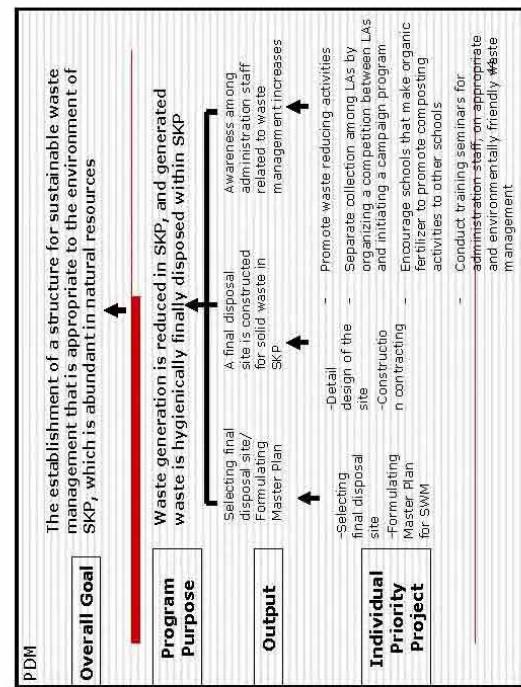
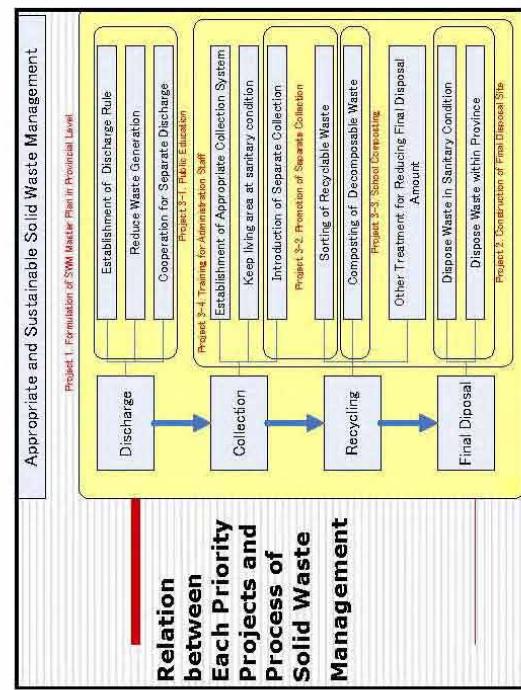
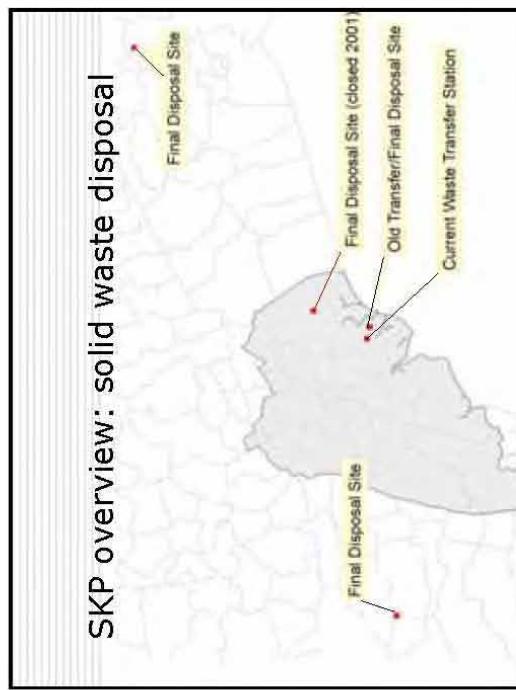
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## 2. Appropriate and Sustainable SWM in SKP: Background

- There is no final disposal site located within SKP. All collected wastes from a transfer station are transported to disposal sites in neighboring Ratchaburi and Samut Sakhon Provinces as shown in the next screen.
- If the neighboring Provinces refuse to accept the waste collected in SKP, SKP could end up with many waste heaps in every urban area. This kind of "Waste War" has occurred in many cities in the world, including Tokyo, Japan.

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Project 1: Formulation of SWM Master Plan in Provincial Level

Project 2: Construction of Final Disposal Site

**Relation between Each Priority Projects and Process of Solid Waste Management**