

JCCI Clean City Initiative International Seminar 2023

**Solutions and Strategies of
Environmental Management
“Thinking about Clean Cities
from Master Plan Development”**

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Objective of this Session

For the solutions of environmental problems, especially caused by human activities, the roles of master plans (M/Ps) are discussed.

So that we can have ideas about the importance of M/Ps and implementation of projects designed in such M/Ps.

Also, we will re-evaluate the importance of partnership to implement such activities.

Program

Time (JST)	Title	Presenters
11:00 – 11:20	Thinking about Clean Cities from Master Plan Development	Mr. MATSUOKA Hideaki JICA
11:20 – 11:40	The Project for Development of Master Plan for Wastewater Management in Pokhara Metropolitan City, Nepal	Mr. FUJII Katsumi Yachiyo Engineering Co. Ltd.
11:40 – 12:00	ADB’s Approach to Expand City-wide Inclusive Sanitation in developing countries	Dr. K. E. Seetha Ram Senior Consulting Specialist for Capacity Building and Training Projects Asian Development Bank Institute
12:00 – 12:15	A Public Service Approach for Equitable Sanitation Service Delivery	Dr. Roshan Shrestha Deputy Director, Water, Sanitation and Hygiene Bill and Melinda Gates Foundation
12:15 – 12:30	Q&As and Discussions	All
12:30	Closing	

“Thinking about Clean Cities from Master-Plan Development”

- 1. JICA's M/P Projects**
- 2. Development of M/P for Environmental Management for Ha Long Bay, Viet Nam, and the following cooperation**

1. JICA's M/P Projects

What are M/P projects?

- **These are conducted to formulate comprehensive and long-term sectoral development plans for an entire country or for specific regions. Master plans ensure efficient execution of multiple projects by making them mutually compatible and by clarifying their priority.**
- **Projects ranked in order of priority in the master plan often become the object of feasibility studies.**

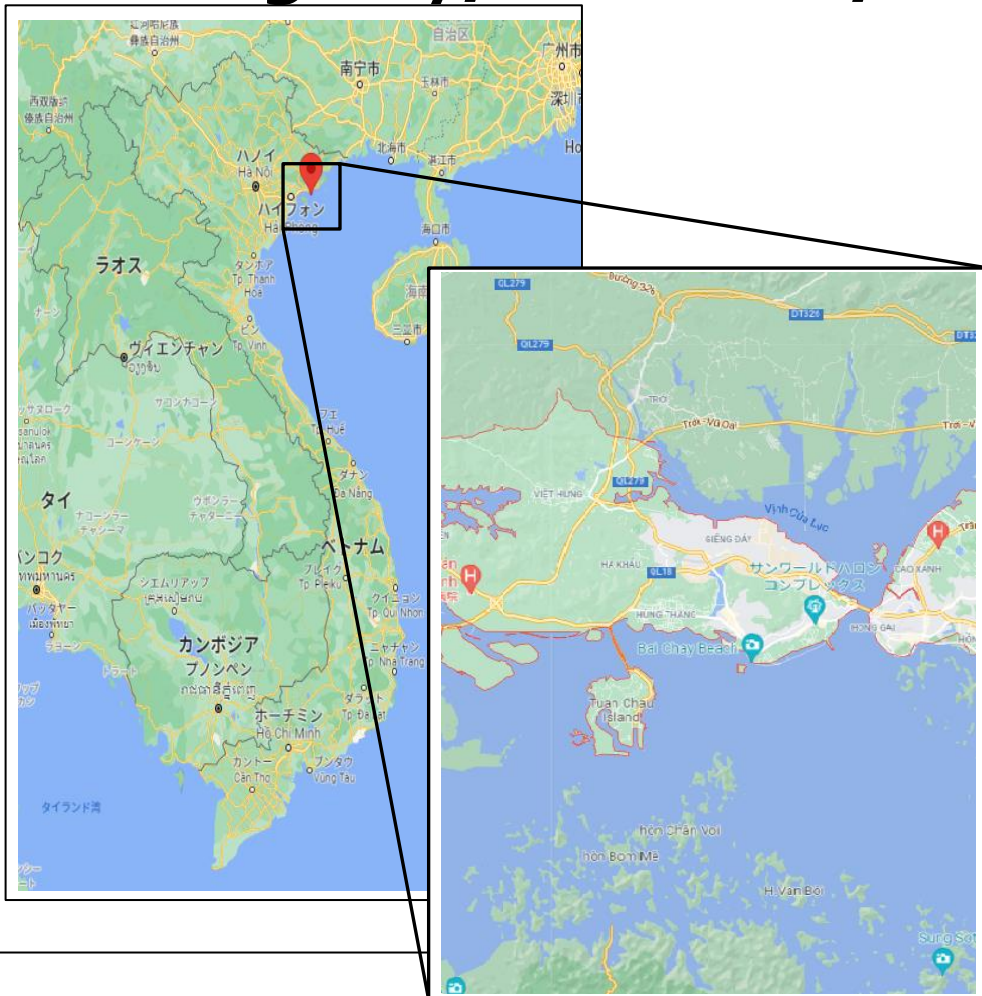
(from JICA's Annual Report 2001)

1. JICA's M/P Projects

Examples of JICA' M/P projects in Environmental Management

Country	Title	Year
Thailand	Bangkok Sewerage System Project	1981
Viet Nam	The Study on Environmental Management for Ha Long Bay	1998 - 1999
Indonesia	Project for Capacity Development of Wastewater Sector through reviewing the Wastewater Management Master Plan in DKI Jakarta	2010 - 2012
Sri Lanka	The Project for the Strategic Master Plan under Sewerage Sector	2015 - 2017
Bangladesh	Project for Strengthening of Solid Waste Management in Dhaka North City, Dhaka South City and Chittagong City	2017 - 2022
Sri Lanka	Project for Formulation of Western Province Solid Waste Management Master Plan	2019 - 2023
Nepal	Project for Development of Master Plan for Wastewater Management in Pokhara Metropolitan City	2021 - 2023
Fiji	Project for Formulation of Wastewater Treatment Master Plan in Western Division	2021 - 2024

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation



- Ha Long Bay is a popular tourist spot and registered as a World Heritage in 1994.
- It is famous with its beautiful natural scenery, but at the same time threatened by environmental pollution caused by industry (e.g. mining) and increase of population including tourists.



(出典: HIS)

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

- From 1998 to 1999, JICA conducted the study on environmental management for Ha Long Bay.

Objectives	<ul style="list-style-type: none">a) To formulate an environmental management plan for Ha Long Bay which is compatible with nature conservation and human activities, andb) To transfer technology to the counterpart personnel in the course of the study
Contents	<p>The fundamental goal of the Environmental Master Plan for Ha Long Bay is to be set as “environmentally sound and sustainable development of Ha Long Bay Area” through achieving the following.</p> <ul style="list-style-type: none">✓ Protection of the World Heritage✓ Achievement of environmental protection for sustainable economic growth✓ Establishment of enforcement capability of environmental management

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

The result of the study is as follows.

- ✓ The factors affecting the environment of Ha Long Bay area were analyzed.
- ✓ The simulation model was established which can evaluate the water quality of Ha Long Bay area.
- ✓ The framework of environmental management of the area including some priority projects was developed.

Selected Priority Projects and Programs

No.*	Priority Projects and Programs
3	Bac Dang Wastewater Treatment Plant Construction Project
15	Pilot Rehabilitation Project on Coal Mining Area
22	Tourism Area Sanitation Improvement Project (Phase 1)
26	Mangrove Swamps Rehabilitation Project
29	Environmental Monitoring Program
32	Visitor Center Construction Project

Note: * Project Nos. in the IEMP

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

Based on the result of the M/P study, the following projects were formulated.

- ✓ **The Project for Environmental Protection in Halong Bay (2010 - 2013)**
- ✓ **Project for Green Growth Promotion in Halong Bay Area, Quang Ninh Province (2016 - 2019)**
- ✓ **Green Growth Advisor in Quang Ninh Province (2021 - 2023)**
- ✓ **Ha Long City Water Environment Improvement Project (LA signed in 2020) .**

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

The Project for Environmental Protection in Halong Bay (2010 - 2013)

For the sustainable tourism of Halong Bay area, the capacity of environmental management of counterpart personnel was strengthened.

- ✓ Capacity of monitoring, inspection and auditing
- ✓ Appropriate land use balancing economic development and the environment
- ✓ Planning capacity of sustainable tourism
- ✓ Environmental education and public relations

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

Project for Green Growth Promotion in Halong Bay Area, Quang Ninh Province
(2016 - 2019)

Green Growth was promoted in the area through sustainable tourism and industrial activities.

Output 1: the Proposal of green growth is developed.

Output 2: a Pilot activity for promotion of green growth is conducted.

Output 3: a sustainable tourism plan is conducted.



Shiga prefecture cooperated to conduct seminars.

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

Green Growth Advisor in Quang Ninh Province (2021 - 2023)

The Green Growth advisor has been dispatched from Shiga prefecture of Japan, who has rich experiences of protection of Lake Biwa, the largest lake in Japan.



Halong Bay Goals
(HBGs)

◆ Expansion of Green Growth Promotion

- Installation of Decentralized Wastewater Treatment System, and arrangement of waste collection vehicle
- Establishment of Johkaso maintenance system
- Collection and transportation of sludge, waste and marine plastic waste
- Strengthening of environmental monitoring and implementation
- Effective use of sludge by recycling

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

Ha Long City Water Environment Improvement Project

(LA signed in 2020)

A Yen Loan project for development of wastewater management (11.9 billion JPY).

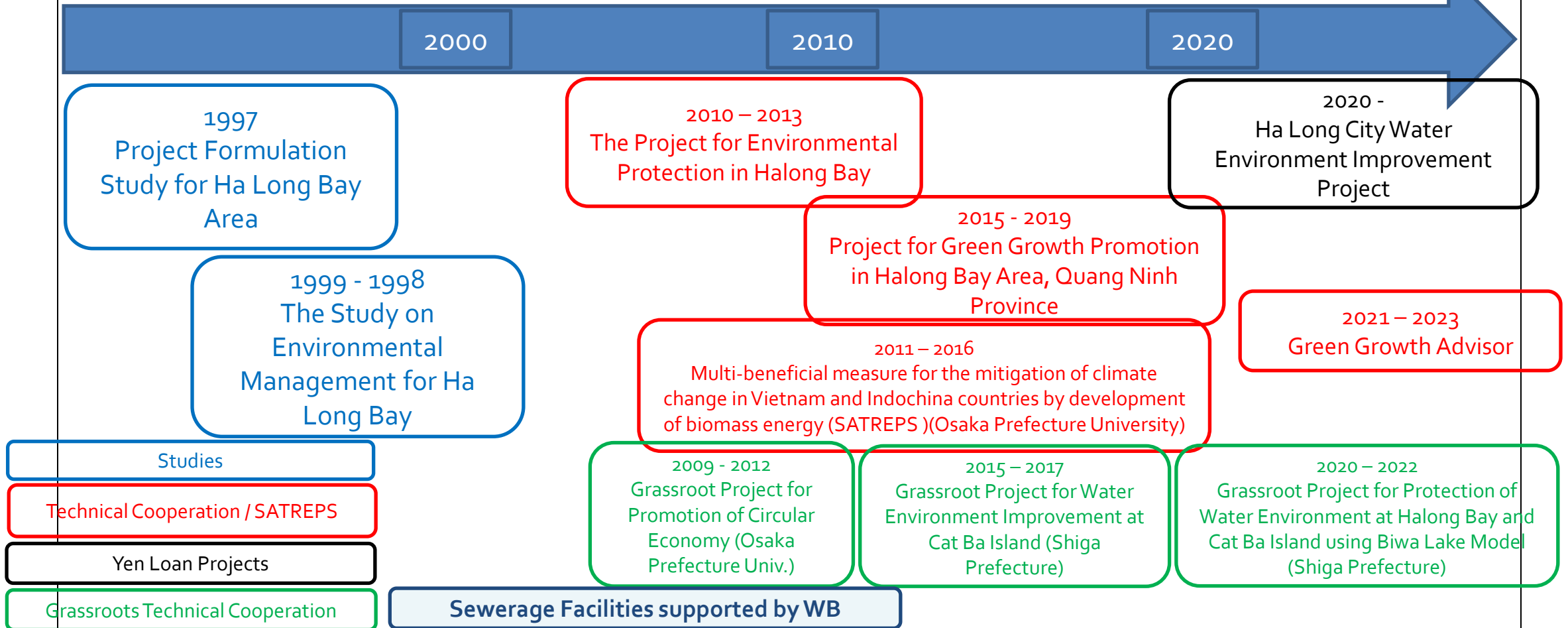
- **Wastewater treatment plants**
- **Installation of sewerage pipelines**
- **Consulting service**

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation

In addition to the cooperation by Japan, there is also support for sanitation in Ha Long Area by other partner.

World Bank supported the construction of wastewater treatment plants and sewer pipes in Bai Chay and Hong Gai areas of Ha Long City from 1999 to 2009.

2. Development of M/P for Environmental Management at Ha Long Bay, Viet Nam, and the following cooperation



As we saw, a master plan is very important to develop mid-term and long-term strategies for environmental management.

Based on a M/P, we can have a perspective of “what to do” and “how”. To achieve the overall goal, not only the support from Japan but also collaboration with other partners is significantly important.

Now, we are going to see another example in Nepal.