JCCI ~JICA Clean City Initiative~

JICA addresses waste, water and air pollution, and other environmental problems that cause health problems to create clean cities.























Contribution: JICA Clean City Initiative

To benefit 500 million citizens in 50 countries by 2030!

To Developing Countries;

- **♦ Human Security:** Ensure **safe and healthy living environment**
- **◆Quality growth:** Realize economic growth which is inclusive, sustainable and resilient
- ♦With/Post COVID-19: Reduce infection risk through maintenance & improvement of sanitary urban environment

To SDGs

















To Global Environment;

- ◆Marine Plastic Pollution: Prevent the discharge of plastic waste into rivers / oceans, toward realization of "Osaka Blue Ocean Vision" (aims to reduce additional pollution by marine plastic litter to zero by 2050)
- ◆Climate Change: Prevent the generation of greenhouse gas (e.g. methane) through proper waste treatment
- ◆Biodiversity: Prevent further environmental pollution thereby conserving ecosystems

Piles of waste that keep increasing and plastic waste in the ocean

In Sub-Sharan Africa,
70% of waste is left
in uncontrolled disposal sites





Residential and industrial wastewater released to the environment is causing serious health problems

3.6 billion people live without adequate hygiene services such as toilets

Fourth biggest cause of death in the world is air pollution caused by industrial activities and cars

According to data released in 2019,

6.67 million people died from Air pollution



Environmental measures in developing countries also concern Japan's environment and public health

Solid Waste & Inappropriat e Disposal

[Challenges] Environmental Burden associated with Economic Development/Urbanization

Water Pollution

Air Pollution

- Odor & deteriorated landscape
- Vector-borne, water-borne & respiratory/cardiovascular diseases
- Discharge and accumulation of waste (including plastics) in rivers/ocean
- Pollution of public water, groundwater
 & soil
- Generation of greenhouse gas (e.g. methane) from waste facilities, etc.

Lack of Institutional/Administrative Capacity and Physical Infrastructure Low Policy Priority and Public Awareness on Environmental Protection

For the Residents:

- Deteriorating public sanitation & living environment
- Increasing health damage and risks

For the Country:

- Urban & environment issues
- Negative impact on tourism, fishery & economy

For the Earth:

- Marine plastic litter
- Global warming
- Damage to ecosystem

Approach 1

Improve waste disposal structures to create a recycle-oriented society

Approach 2

Create a healthy water, air, and soil environment through environmental regulations and pollution prevention measures

- Create and implement a system to collect, transport, and dispose of waste
- Enhance the ability to analyze pollutants to understand the current problems

Reduce waste by introducing segregation and recycling

- Develop and implement counter-pollution measures based on scientific evidence
- Support policies that reduce waste generation and promote effective use of resources
- Strengthen controls over pollutant generation while promoting investments in environmental measures

Two cooperation approaches for solving problems

Basis for common initiatives

Develop human resources who will be in charge of actions ranging from organizing facilities and legal systems to raising social awareness

Challenges of developing countries

Technology/ Facilities are not organized facilities Lack of technology and budget for maintenance Inadequate operational and fiscal management abilities **Finance** Insufficient financial plan and securing of funds Lack of budget for counter-pollution measures **Inadequate policy development and coordination Organizational** abilities No structure to execute legal systems and carry out structure administrative tasks Legal Insufficient abilities to develop legal systems and rules, guidelines, and standards for operating them system Insufficient cooperation and participation of citizens Social Inadequate compliance (e.g., illegal operations by awareness

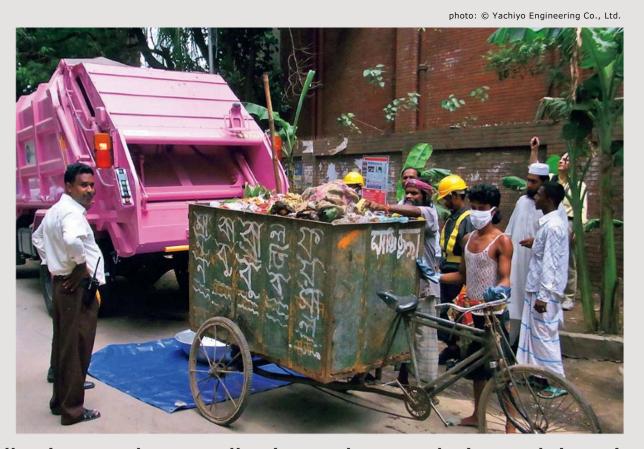
1 Environmental Strategy, Climate Action in Vietnam Green growth, in Ha Long Bay-World heritage site



Ha Long Bay is registered as a world heritage site and is a popular tourist spot dotted with limestone islands. Our goal is to achieve economic growth while recovering clean water and protecting the environment.

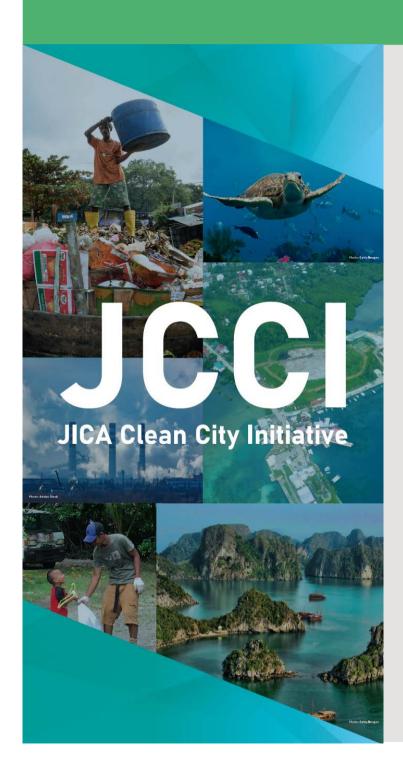
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Garbage collection rate improved significantly from 44% in 2004 to 85% in 2021 in Dhaka, Bangladesh



In Dhaka, garbage collection cars began collecting garbage at designated times in designated places, which raised the garbage collection rate.

Efforts are also made to educate cleaners who clean streets and load garbage onto collection cars.





Thank you for your kind attention

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