

JICA's Cooperation for the 3Rs



Implementation of 3R's program in a school,

30/10/2006

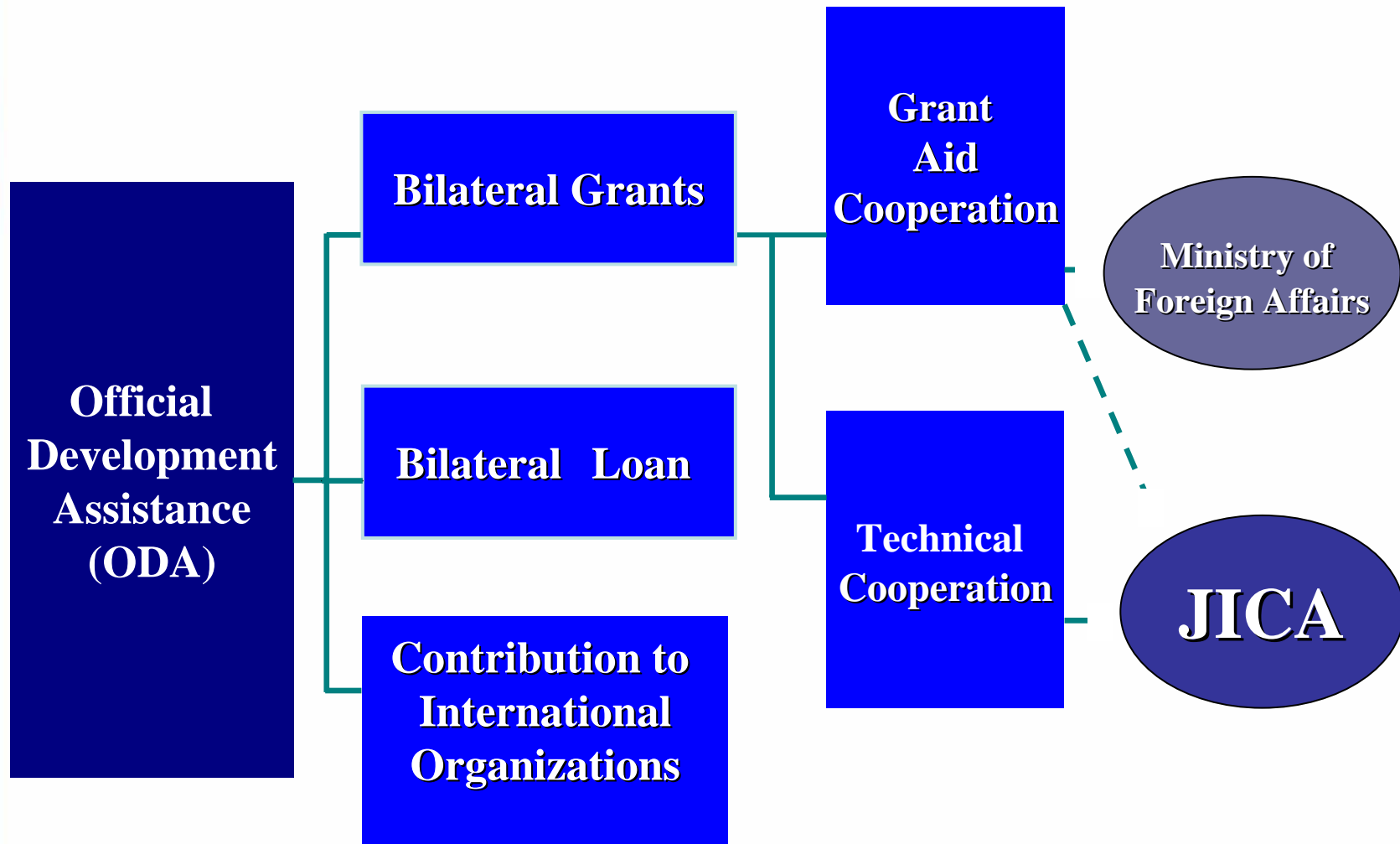
Global Environment Department

JICA

Today's Presentation

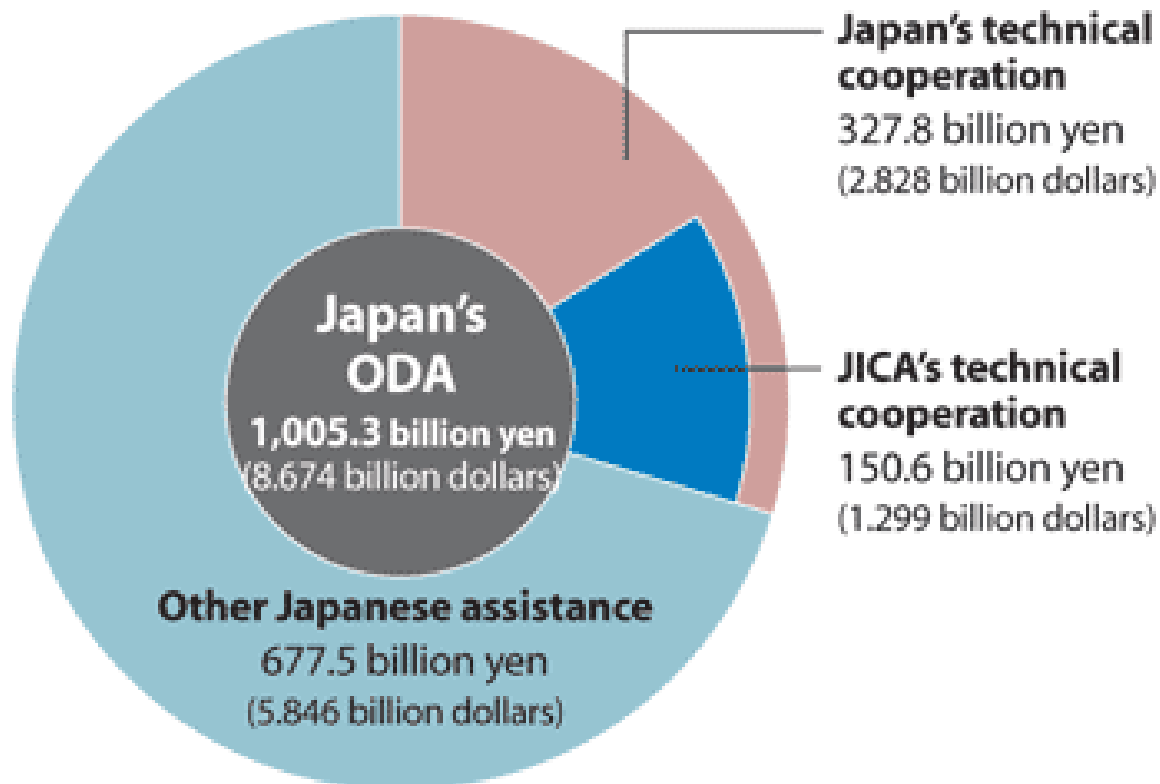
- **Outline of JICA**
- **JICA's Cooperation for Solid Waste Management in Asia**
(e.g. Cambodia, Bangladesh)
- **JICA's 3Rs related projects**
(e.g. Malaysia)
- **JICA's Lessons Learnt**

ODA and JICA



JAPAN'S ODA and JICA'S Technical Cooperation

Japan's ODA & JICA's Technical Cooperation (Calendar Year 2003)

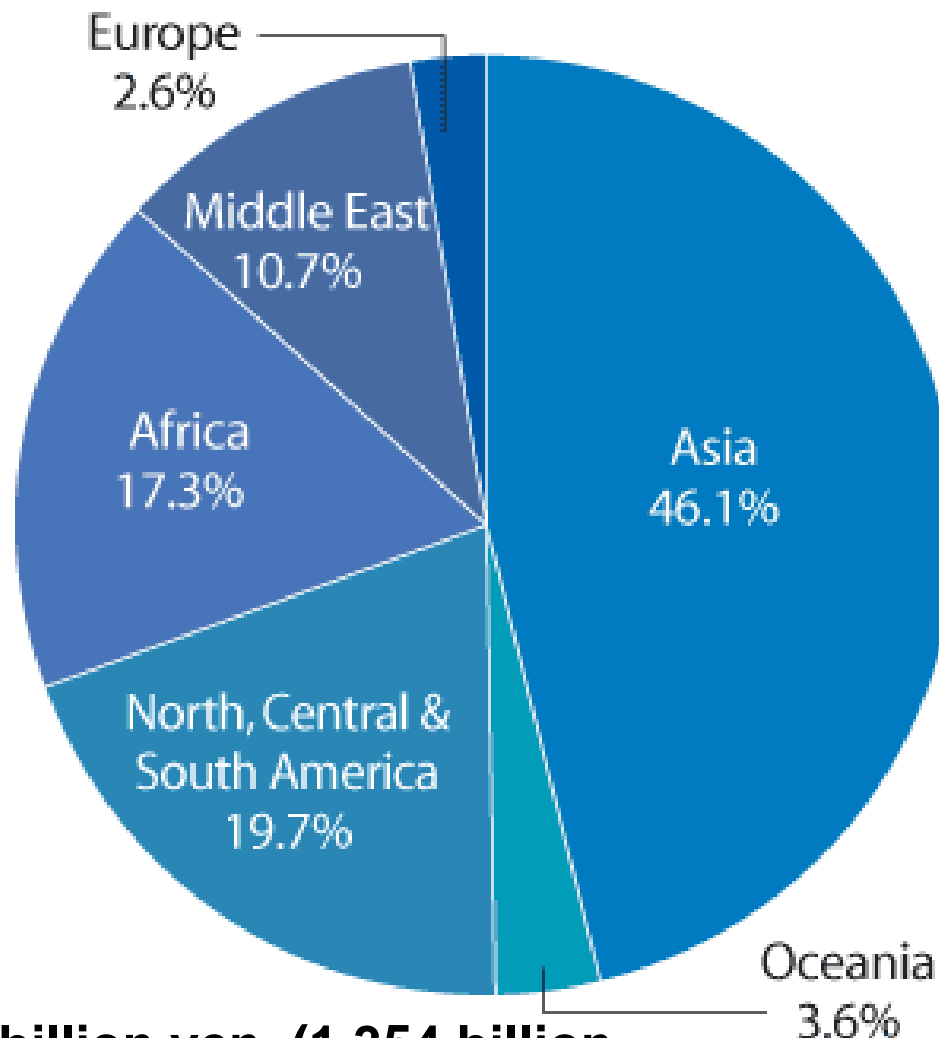


- Japanese ODA per capita: 7,880 yen
- Of which, used for JICA projects: 1,180 yen

Source: OECD Development Assistance Committee (DAC)

JICA's Assistance by

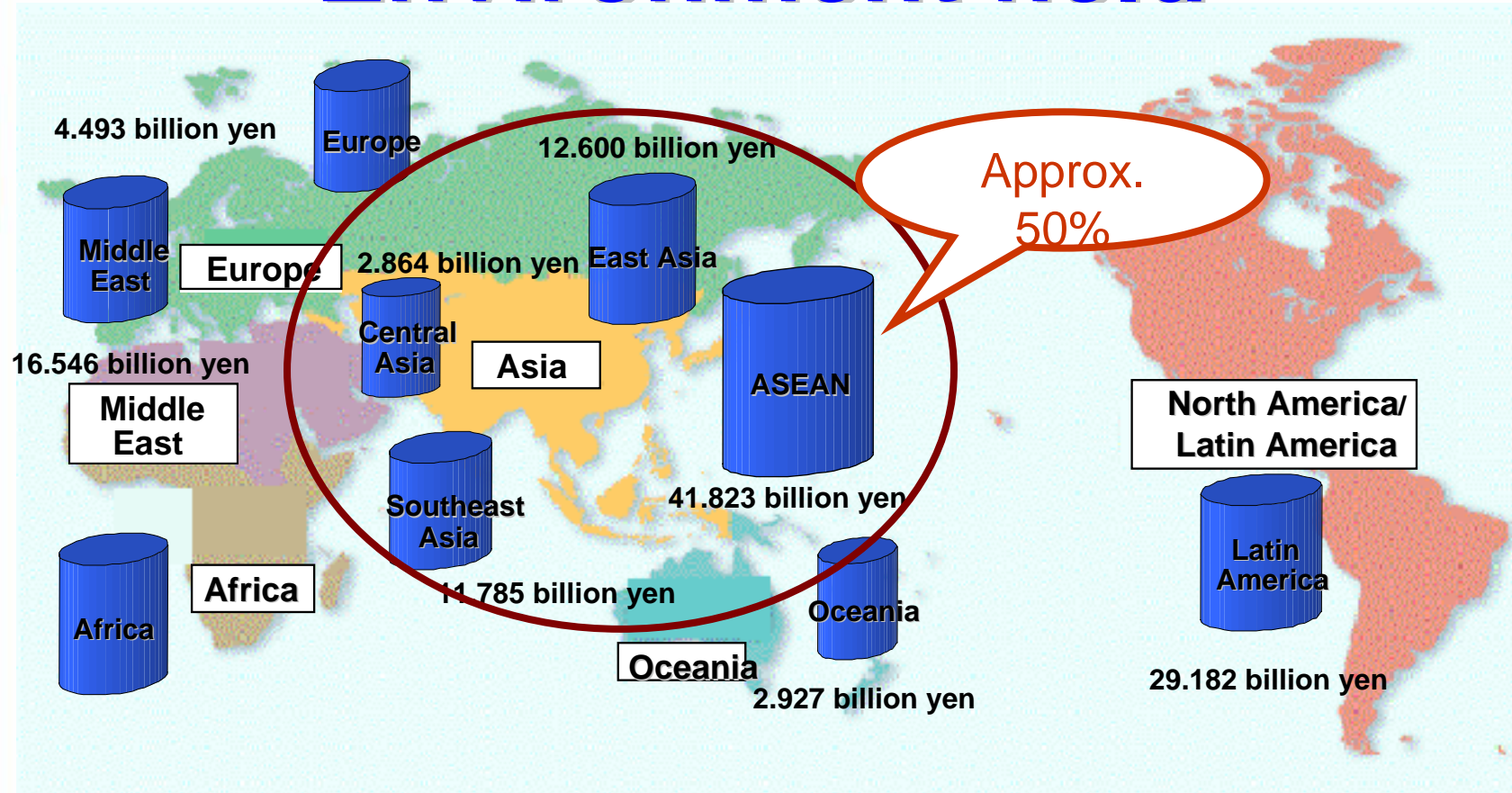
JICA's Assistance by Region (Fiscal Year 2004)



Total: 146.4 billion yen (1.354 billion dollars)

Source: JICA brochure

Assistance in the Environment field



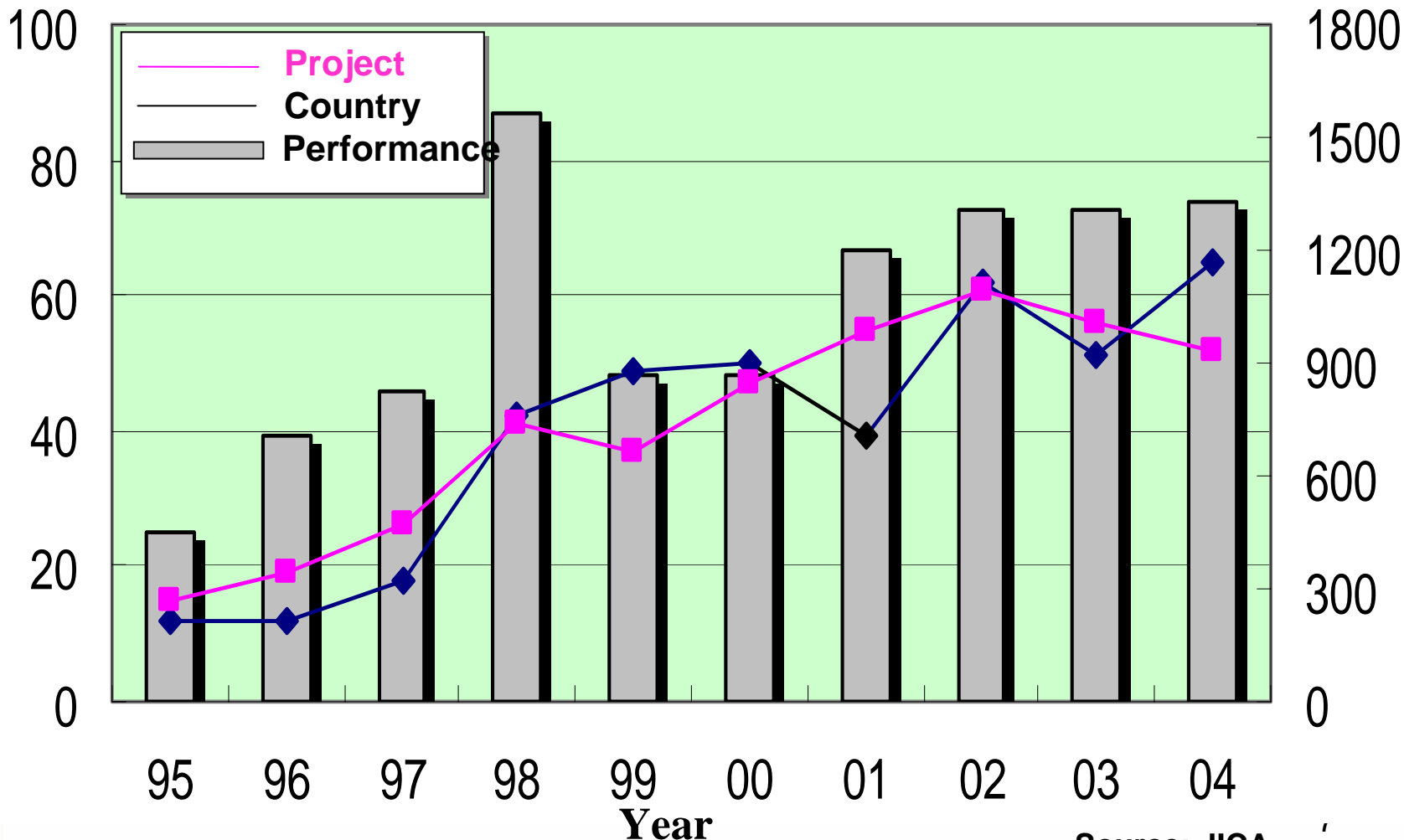
Total: approximately 139.028 billion yen (from fiscal 2000 to 2004)

Main programs include Technical Cooperation Projects, Development Studies, Studies on Grant Aid Programs, Dispatch of Experts, Dispatch of Volunteers, Technical Training Programs, among others.

Trends in Waste Management

Number of Projects
& Countries

Performance
(million yen)



Source: JICA

Progress of Assistance Approaches in Solid Waste Management Sector

1970s-

Hardware-input approach

A large, horizontal cyan arrow pointing to the right, representing the hardware-input approach of the 1970s.

1980s-

Software-input approach

A large, horizontal green arrow pointing to the right, representing the software-input approach of the 1980s.

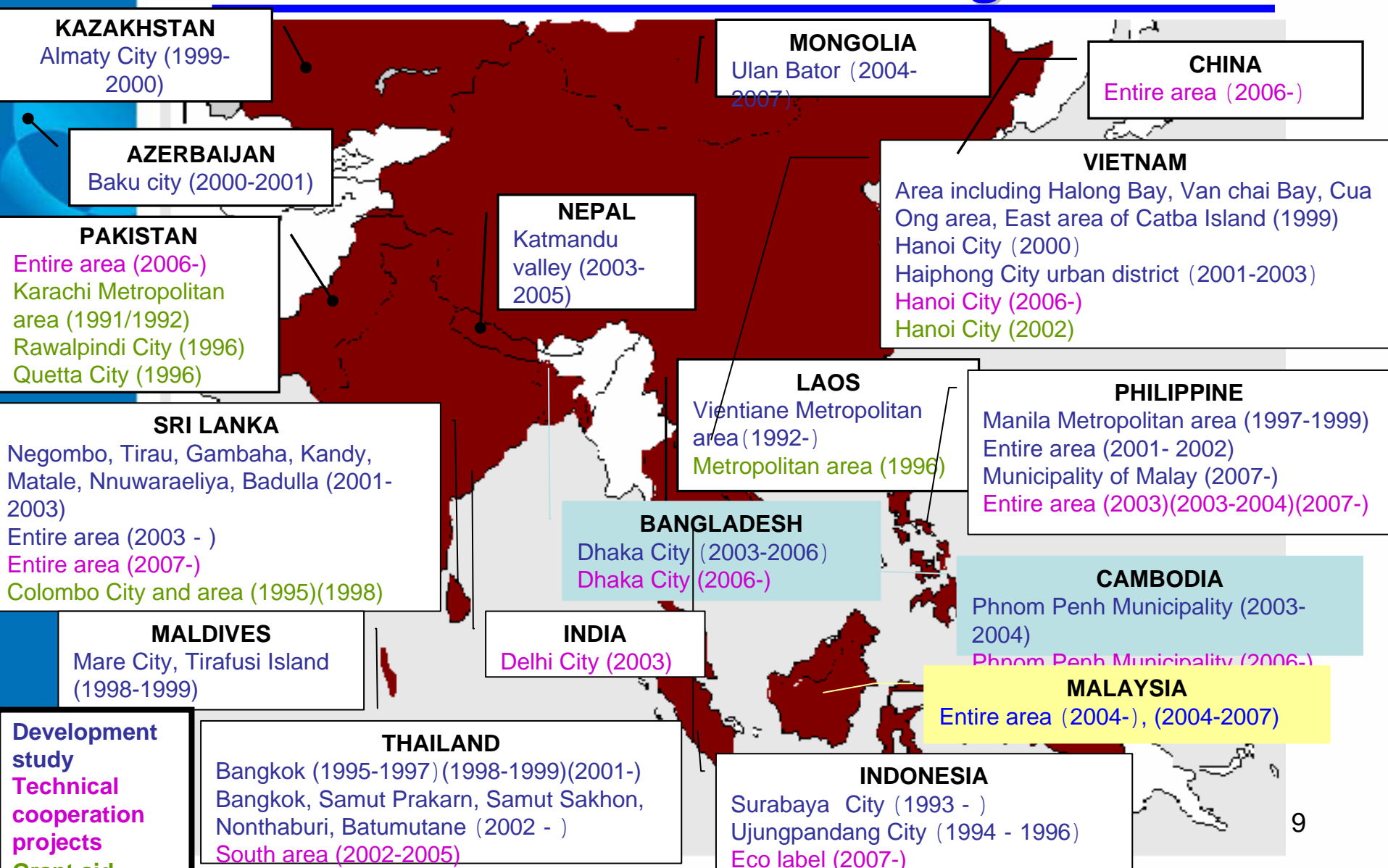
1990s-

CD-support approach

A large, horizontal yellow arrow pointing to the right, representing the CD-support approach of the 1990s.

CD; Capacity Development

JICA's Technical Cooperation for Solid Waste Management



SWM Project (Cambodia)

- **Title:** The Study on Solid Waste Management in the Municipality of Phnom Penh in the Kingdom of Cambodia
- **Period:** Feb 2003 – March 2005
- **Purpose:**
 - 1) To develop a master plan for SWM
 - 2) To conduct a feasibility study for the selected priority projects
 - 3) To transfer technology to the counterpart
- **Counterpart unit:**
 Department of Public Works and Transport
 Phnom Penh Waste Management Authority



Waste pickers at the final disposal

SWM project (Cambodia)



Waste composition

survey



Community meeting for
waste pickers



Improvement of final
disposal site

Phase 1

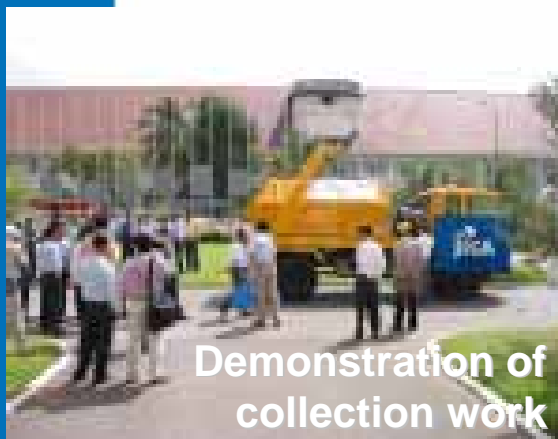
(Feb 2003-Aug 2003)

Phase 2

(Sep 2003-March 2004)

Phase 3

(May 2004-March 2005)



Demonstration of
collection work



3Rs Workshop



C/P Training

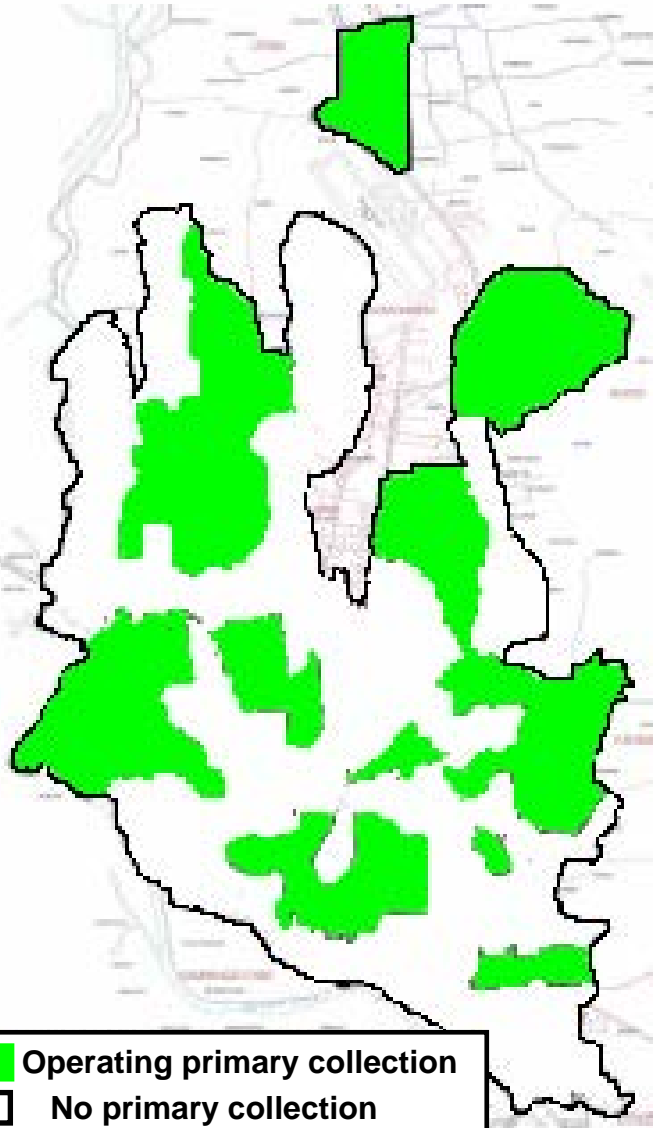
SWM Project (Bangladesh)

- **Title:** The Study on The Solid Waste Management in the Dhaka City
- **Period:** November 2003 – March 2006
- **Purpose:**
 - 1) To develop a Clean Dhaka master plan
 - 2) To improve and strengthen the capabilities and skills of Dhaka City Corporation (DCC) personnel in terms of SWM
- **Counterpart unit:**
Dhaka City Cooperation (DCC)



Illegally dumped waste 12

SWM Project (Bangladesh)



Clean Dhaka Master plan:

- To improve community-based primary collection
- To strengthen the capacity for secondary collection and transport
- To improve and secure final disposal
- To improve the administrative capacity for SWM



Solid Waste Management Project in Dhaka City (February 2007-March 2010)

Distribution for Primary Collection

JICA's 3R-related projects

Country	Title	Period	Purpose
Malaysia	The Study on National Waste Minimization in Malaysia	2004.7 - 2006.7	To formulate a master plan and an action plan and to develop the capacity of the governments and communities for promoting recycling activities.
Vietnam	The Project for Implementation Support for 3R Initiative in Hanoi City	2006.11 - 2009.11	To prepare a harmonized 3R system based on source separation programs of organic waste for introduction to the entire area of Hanoi City.
Philippines	The Study on Recycling Industry Development in the Republic of the Philippines	2006.7 – 2008.2	To formulate policies and measures to promote the recycling industry.

JICA's activities in Malaysia related to SWM

1) Dispatch of experts

- Action Plan for waste management (1986-1988)
- Sanitary landfill (1988-1990)
- Environmental Education (1991-1993)

2) Training

- Various topics on SWM (e.g. waste landfill technology)

3) Development study

- Penang Waste Deposit Program (1987-1989)
- The Study on the Safe Closedown and Improvement of Waste Landfill Disposal Sites (2002-2004)
- The Study on National Waste Minimization (2004-2006)

The Study on National Waste Minimization in Malaysia

- **Period:** 2004.7 - 2006.7
- **Purpose:**
 - To formulate a master plan and an action plan for the promotion of recycling.
 - To develop the capacity of the governments and communities for promoting recycling activities.
- **Counterpart unit:** Ministry of Housing and Local Government



Collection for recycling



Explanation to the public

JICA's Lessons Learnt

~ Road to the 3Rs ~

Need for the Improvement of SWM

Storing,
Discharge

Collection,
Transport

Final disposal

3Rs

Needs & Capacity

National
Government

Local
Government

Private
Sector

Academic
Institutes

Communities

NGOs /
NPOs