INTRODUCTION

Background
- Exhaustion of environment in megacities due to urbanization and industrialization
- Increasing number of megacities in developing countries
- The importance of clean water availability for survival and economic development

Objective
- To present current stands of clean water problems in Jakarta
- To pose critics toward Jakarta’s water management

FACTS AND FIGURES

a) General Detail of Jakarta
- Area: 662 km²
- Population: ca. 13 million (19,600 people/ km²)
- Rainfall: 1500-2500 mm/ year

b) Problematical Issues
- Decreasing groundwater level by up to 5 m/year²
- Land subsidence rate of around 10 cm/year³
- Jakarta regular flooding (in 2007: damage of USD 2.05 bln.⁴)
- Seawater intrusion

c) Constitution and Regulations
- The Indonesian Constitution (Article 33 year 1945) regulates about the government’ control over natural resources, the use of the resources for the welfare of the whole citizens, and democracy/ cooperative based economy
- The water management should be based on cooperative/collective principle (Law No. 11 year 1974)
- Water privatization took place only based on Presidential Decree No. 96 year 2000; the new water law that legitimizes the role of private sector in water sector came later (Water Law No. 7 year 2004)

d) Water Supply Operators
- In DKI Jakarta Province:
    - PAM Jaya (the state-owned enterprise)
  - Since 1998
    - Private Sector Participation
      - (25-year concession contracts)

\[\text{Table 1: Comparison of the expected and achieved water supply condition in Jakarta after the privatization} \]
\[
\begin{array}{|c|c|c|}
\hline
\text{Condition in 1996} & \text{Expected condition in 2002} & \text{Achievement in 2002} \\
\hline
\text{Groundwater overexploitation} & \text{Severe} & \text{Reduced} & \text{No significant reduction} \\
\hline
\text{Service coverage} & 41\% & 70\% & \text{West: 44.2\%} \\
\hline
\text{Unaccounted for water} & 57\% & 35\% & \text{East: 45.3\%} \\
\hline
\text{Water sold (million m³/year)} & 176 & 342 & 255 \\
\hline
\end{array}
\]

e) Comparison of the expected and achieved water supply condition in Jakarta after the privatization

Source: Lanti, 2006⁶

FINDINGS

Management of Competences

Technology
- Choices of appropriate technology
- Implementation of the chosen technology
- Control mechanism of the application

Networking
- Creating partnership with private sector and community
- Maintaining cooperation at all levels

Behaviour
- Knowledge about the facts and problems
- Competences to tackle the problems
- Commitment to act properly

Regulation
- Construction of adequate and appropriate water policy and law
- Policy and law enforcement
- Control of the implementation

Marketing
- Promoting awareness, motivation, and active participation in water management at all levels

Suggestion for Future Research
- Consider suitable technology, incl. big centralized as well as small decentralized projects; not just following trends.
- Identify alternatives of privatization; involving community as active participants.
- Generate incentives to influence people’s behaviour and to make participation in water management attractive.
- Create proper policies to combine the efforts of providing clean water supply and pollution prevention.
- Find effective and efficient marketing approach to promote awareness, motivation, and active participation.

References


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