

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 million¹ (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 legitimates the role of private sector in water sector came later (*Water Law No. 7 year 2004*)

d) Water Supply Operators In DKI Jakarta Province:

1922 – 1998
PAM Jaya (the state-owned enterprise)
Since 1998
Private Sector Participation
(25-year concession contracts)



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

	Condition in 1996	Expected condition in 2002	Achievement in 2002
Groundwater overexploitation	Severe	Reduced	No significant reduction
Service coverage	41%	70%	West: 44.2% East: 62.2%
Unaccounted for water	57%	35%	West: 45.3% East: 48.3%
Water sold (million m ³ /year)	176	342	255

Source: Lanti, 2006⁵

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

- ¹ UN. 2005. *World Urbanization Prospects: The 2005 Revision*. Available at: www.un.org/esa/population/.../2005WUP_DataTables11.pdf; Retrieved on 27 July 2009.
² Pimpinan Pusat Gerakan Pemuda Ansor (PPGPA). 2008. *Awas, Jakarta Ambles: Tiap Tahun Air Tanah Turun 5 Meter*. Available at: <http://www.gp-ansor.org/berita/awas-jakarta-ambles-tiap-tahun-air-tanah-turun-5-meter.html>; Retrieved on 16 March 2009.
³ Delinon, R.M. 2007. *Groundwater Management Issues in the Greater Jakarta Area, Indonesia*. Proceedings of International Workshop on Integrated Watershed Management for Sustainable Water Use in a Humid Tropical Region. JSPS-DGHE Joint-Research Project, Tsukuba, October 2007.
⁴ Waspola. 2007. *Why Jakarta Need MPDT to Solve Multi Dimension Environmental Problems*. Available at: www.waspola.org; Retrieved on 15 March 2009.
⁵ Lanti, A. 2006. *A Regulatory Approach to the Jakarta Water Supply Concession Contracts*. *Water Resources Development* 22(2): 255-276.