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# MAKASSAR, INDONESIA



Promoting Innovations in Wastewater Management

**Making Sanitation a Sustainable Business**

29–31 January 2012 • ADB HQ, Manila, Philippines



- Wastewater Coverage: Management services and facilities
  - 0,01 % Area
  - 0,02 % of Population
- Goals and targets 2015
  - ODF
  - Establish Wastewater Sewerage System Losari
  - 3,5 % population (Houshold) conect to services Sewerage
- Investment(s) Needed to Meet Goals :
  - Modular system for Slum Area and Intermediate Area : US \$ 8 Million.
  - Sewerage sistem Losari : US \$ 60 Million



- Existing Wastewater Policy
  - Household : in Plan, but Industrial : available (national regulation)
  - Monitoring : not Available
  - Enforcement : Not Available
- Existing Plans
  - Master Plan : Available (2011-2030).
  - The Finance need for construct wastewater infrastructure approximately US \$ 114 million (phase I / 2011-2015), US \$ 246 million (phase II / 2015-2020), and US \$ 336 million (phase III / 2020-2030).



# Focus Areas:

## WHAT ARE THE BARRIERS?

- **Enabling Environment :**

- Topography is plain, ground water is not deep, and the land to be influence watersea ( one part land position under sea level).
- The Regulation is not yet available for support municipal policy.
- Coordinate stakeholders is not good and formal Institution not yet ready.
- Little settlement and density of population , land price very expensive can difficult find location for infrastructure.

- **Social Issues :**

- Low public awareness and behaviour community could be major barriers for implementation policy.

- **Technology :**

- Modern technology infrastructure maybe high cost management, and so we choose low and middle technology sustainable in order to low cost management.
- Many Peoples did not knowledge of Wastewater technology

- **Financing :**

- City Municipal don't have many fund for establish and management infrastructure .



- Improve enabling environment
- Advocated for many peoples, stakeholders, policy maker to improve awarennes public .
- Made regulation and policy wasterwater management
- Private sector involvement and or Coorporated Social Responsibility (CSR)
- Needs for ADB and other donor support: ongoing and planned

