COMMUNITY BASED SANITATION (SANIMAS) IN INDONESIA

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VISION
Development of environmental sanitation infrastructures to achieve a live-able, safely, healthy and sustainable human settlements for better quality of community health and environmental conservation.

MISION
- Develop environmental sanitation (wastewater, solid waste & urban drainage) infrastructures services for urban and rural to improve community health quality.
- Develop and promote environmental sanitation infrastructures (wastewater, solid waste and urban drainage) to protect environment from pollution of domestic wastewater.
- Strengthen institutional capacities and community to address the environmental sanitation development more efficient and effective.
- Establish law and regulation including standard, manual and guidelines to support regional/local regulation for better environmental management
- Develop financing approaches for funding environmental sanitation improvement.
- Increase community involvement in development process through community participation improvement.
- Create private and other stakeholders participation to support implementation.

PAST EXPERIENCES
- Project oriented
- Lack of people’s participation
- Top-down / political approach
- Creates ‘sanitation monuments’
- Built but not constructed properly or not connected to the main trunk pipe

Operation & maintenance rely to government’s budget

MUNICIPAL WASTEWATER SCENARIO DEVELOPMENT

Approach
Community Based
- Existing Condition
- Developing
- Adequate Sanitation: Rural areas & Block areas
- Develop appropriate system of On-site sanitation and Small Scale Community Sewage System
- Integrated system of existing on-site and new off-site sanitation
- Improve Sludge Treatment Plant (STP) and leachate services.
- On CDS (Cost Sharing based on cost sharing between people, community and municipality)
- New Town
- Develop small sewer or small scale sewage integrated to municipal sewage system to support sanitation program.

Institutional Based
- City Wide
- Metropolitan & Large Cities
- Metropolitan & Large Cities
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SANIMAS IMPLEMENTATION

- SANIMAS was launched in 2003 as a Pilot Project
- SANIMAS 2003 are located at East Java Province (5 locations) and Bali Province (1 location)
- SANIMAS 2004 are located at East Java Province (6 locations) and Bali Province (2 location)
- SANIMAS 2003-2004 were funded by AUSAID grant managed by WSP - World Bank.
- Community empowerment carried out by BORDA and partners.
- Technical team: Water and Sanitation Working Group (including Ministry of Public Works) is responsible for coordinating and advising program implementation.

FUNDING SCHEME

- Central Government
  - Materials: Rp. 100 Million
- Municipal
  - Construction & Labour Cost: Rp. 200 Million
  - Community empowerment: Rp. 50 Million
- NGO BORDA
  - Community empowerment: ± Rp. 50 Million
- Community (in-kind & in-cash): 2-4% from the total funding

SANIMAS DEVELOPMENT 2003 - 2009

MORE THAN 420 SANIMAS/CBS CLUSTERS ALL OVER INDONESIA

CONCEPT

- Facilitate and assist poor urban communities to plan, implement and maintain sanitation systems of their choice
- Sanitation systems built will become demonstration projects to promote community based sanitation within poor urban areas of Indonesia

OBJECTIVE

- To improve sanitation conditions of poor in densely populated urban area using the community based sanitation/CBS approach
- To ensure that the community based sanitation/CBS become one of the options for the local government’s wastewater management system
SANIMAS Principles

- Demand Responsive Approach
  SANIMAS project will only assist and facilitate municipalities and communities who express an explicit demand.
- Self-selection
  Eligible municipalities having a high verifiable demand for SANIMAS will be selected and such communities having past experiences in self-help projects, show active commitment and are ready to contribute time and resources are more likely to be selected than others.
- Multi-source Financing
  Stakeholders from communities, local government and central government will share investment costs for implementing SANIMAS.
- Participatory of beneficiaries
  Successful implementation of SANIMAS rely on active participation of public and community stakeholders during planning and construction.
- Technology Informed Choices
  SANIMAS system has several technical options such as: toilet component, collection component, treatment component and Disposal/reuse component.
- Capacity Building
  Training of facilitators and communities in: community organization & institution building; identifying, selecting and implementing SANIMAS technical options; healthy sanitation and hygiene practices.

SANIMAS FILLS THE GAP

- Conventional centralized & high costs systems
- Common on-site Sanitation Systems
- Roof drain system
- Sanitary land filling
- USA 100/HH
- USA 500/HH
- USA 1000/HH

MAIN SANIMAS/CBS SYSTEMS

- Simplified sewerage system that is connected to appropriate wastewater treatment plant (in poor areas where majority of households are privately owned and space is available for sanitary hardware)
- Community Sanitation Center that comprises of water point, toilets, bathrooms and laundry area in areas where majority live in rented rooms/households and no space is available for sanitary hardware
- Shared septic tank that is only possible to connect household within the clusters of 5-6 HHs

COMMUNITY CHOICE OF TECHNOLOGY

<table>
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<th>No.</th>
<th>Year</th>
<th>CHOSEN TECHNOLOGY</th>
<th>TOTAL</th>
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<td></td>
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<td>Community Sanitation Center</td>
<td>Simplified Sewerage</td>
</tr>
<tr>
<td>1</td>
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<td>3</td>
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<tr>
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<td>6</td>
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<td>8</td>
<td>2009</td>
<td>74</td>
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<tr>
<td>TOTAL</td>
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<td>327</td>
<td>93</td>
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SANIMAS IMPLEMENTATION STEPS

- Preparation
  - Facilitators Selection
  - Training
- Municipality Selection
  - Letter of Interest
  - Location Elected
  - Municipal Elected
  - MoU signed
- Community Selection
  - Local Facilitator Agent (LFA) candidate
  - MoU Preparation
  - Sosialization Workshop
- Community Action Plan
  - Longlist
  - Shortlist
  - Organization, Technology Choice, DED, Cost, Time Schedule
- CBS Construction
  - Operational, Monitoring & Evaluation by Community
- Operation & Maintenance
  - Standardized Effluent
  - Water related epidemy decreased
  - Sustainability Development

PREFERED SANIMAS OPTIONS

- Simplified Sewerage System
- Shared Septic Tank
- Community Sanitation Centre (MCK+++)

SANIMAS IMPLEMENTATION STEPS
The sanitation system chosen should be all of the following*:

- socioculturally acceptable
- economically feasible
- financially affordable
- technically appropriate, and
- institutionally feasible.

ANTICIPATED CHALLENGES: TECHNICAL TEAM

- Ensure the quality and sustainability of the sanitation facility
- Capacity building for Design Engineers, Assistant Supervisors and Supervisors

ANTICIPATED CHALLENGES: COMMUNITY ORGANIZATIONS

- Capacity building for community; CBOs Association
- Increase bargaining position of poor community
- Support to speed up the dissemination at national scale
- Sharing experiences and problems among CBOs and operators

COMMUNITY BEHAVIOUR CHANGES

SANIMAS

SHALLOW SEWER: BLITAR – EAST JAVA

BLITAR
BEST PRACTICE: BIOGAS

- Public Toilet and Shallow Sewer for home industry (tofu) equipped with bio-digester to produce Biogas.
- Biogas can be used as an energy alternative for household (HH).

Biogas Production

<table>
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<th>Technology</th>
<th>Input</th>
<th>Output: Biogas</th>
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<tbody>
<tr>
<td>Shallow Sewer (Home Industry)</td>
<td>150 kg soybean/day</td>
<td>2 HH, 1 stove</td>
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<tr>
<td>Public Toilet</td>
<td>100 HH</td>
<td>2 HH, 1 stove</td>
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</table>

BIODIGESTER

- Anaerobic Filter
- Baffle Reactor
- Sedimentation
- Digester

Design Public Toilet
- 10 Toilets
- 2 Bathrooms
- 1 Washing

THANK YOU FOR YOUR KIND ATTENTION

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