

Innovative Project Story

Cambodia – Provincial Water Supply and Sanitation Project

Day 2 group session

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Provincial Water Supply and Sanitation Project

1. Innovation

- Climate change and solar power initiatives
- Advanced but simple wastewater treatment to reduce land and energy needs
- First time use of tunneling (pipejacking) for sewers in Cambodia
- Free household sewer connections and increased revenue collection
- Financial autonomy of public provincial waterworks
- Capacity development for sustainable sector development

2. Sector Issues

- Urban water coverage typically 40-50% in provincial towns/cities
- Sewerage in only a few provincial towns with low levels of coverage and treatment
- Divided responsibilities – different ministries for water supply and sanitation
- Poor financial sustainability for sewerage and sanitation
- Low land availability and frequent land / resettlement issues
- Lack of technical capacity and professionals in the water and sanitation sector



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3. Project Approach / Solution

- Countrywide approach with main development partners
- Assess and identify towns, then prioritize for first project
- Concentrate on 2 or 3 priority towns per project, but provide >90% coverage
- Use new wastewater treatment solutions to reduce/negate need for land acquisition
- Increase customer base to prepare for financial autonomy for public waterworks
- Collect sanitation fees under the water billing and ringfence these only for sanitation
- Implement new ways to build sustainable technical capacity in the sector

4. Story behind the story

- Ceiling for ADB lending, so how to make increase project size and scope:
 - Cofinancing with close partner AFD to pool loan resources
 - Grant support for new innovations (\$10 M JFJCM and \$5 M EU-AIF)
- Integrated project with 2 ministries on one project
- Advance procurement including design-build for some packages



Implementation Issues / Lessons and Sector Devt.

Issues / Lessons

- Capacity of the water supply EA leading to implementation delays
- Design-build packages did not proceed as planned:
 - Unanticipated changes in scope due to external factors
 - Changes of some site locations
 - Lack of qualified bidders after PQ
- 2 water supply packages delayed by >1 year due to failed PQ
- 2 WWTPs and sewerage packages delayed due to scope changes (external factors)
- Some packages changed to DED and traditional procurement
- Unanticipated safeguards delays

Sector Development

- Investing in people is just as important as investing in infrastructure
- 2-year Master's course in water and waste engineering developed at ITC in Phnom Penh
- First batch of 30 post-grad students under full-time scholarships started in Oct 2018 (30% female)
- Preparation for financial autonomy of public waterworks
- Increasing sustainable revenues for sanitation O&M
- Classroom and on-the-job training in various areas of utility services, including twinning with other water utilities

