Participation of local private sector in small rural town water supply

Mirep Cambodia & Laos

Jean-Pierre Mahé. 19/03/2006
Attract local private sector participation to reach the Millennium Development Goals

Entrepreneur operating a small water treatment system, Cambodia
# Main Project Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td><strong>Coverage</strong></td>
<td>16 piped water supply systems so far (14 in Cambodia, 2 in Laos), 30 000 persons</td>
</tr>
<tr>
<td><strong>Water quality</strong></td>
<td>Reaching WHO standards in 90% of random controls</td>
</tr>
<tr>
<td><strong>Consumption level</strong></td>
<td>25l/d/c – 40l/d/c (dry season)</td>
</tr>
</tbody>
</table>
| **Tariffs**                   | Cambodia: $ 0.5 / m3  
Laos: $ 0.22 / m3                                                        |
| **Rate of bills payment**     | 90% immediately, 100% after 1 week                                      |
| **Satisfaction level**        | 80% - 90%                                                               |
Context: small rural towns

Kingdom of Cambodia:
14 millions inhabitants
~300 small rural towns
(between 1000 to 5000 inh.)

Lao PDR
6 millions inhabitants
~120 small rural towns
(between 1000 to 5000 inh.)

- Low coverage of safe water
- Low priority and little public financial means
# Comparison between rural and urban

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Small rural towns</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Occupation</strong></td>
<td>Mostly farmers and fishermen</td>
<td>~40% farmers, ~40% sellers + others</td>
<td>No farmers</td>
</tr>
<tr>
<td><strong>Water supply solutions</strong></td>
<td>Family and community systems</td>
<td>Up to 9 different sources (family, community and private sector)</td>
<td>Piped water only</td>
</tr>
<tr>
<td><strong>Needs</strong></td>
<td>Nearby water</td>
<td><strong>Water at home</strong></td>
<td>safe water with pressure</td>
</tr>
<tr>
<td><strong>Consumption</strong></td>
<td>30 – 40l/d/c</td>
<td>30 – 50l/d/c</td>
<td>100 – 120 l/d/c</td>
</tr>
<tr>
<td><strong>Investment required</strong></td>
<td>$ 40/HH</td>
<td>$ 100- 150 / HH</td>
<td>$ 400 - 500 / HH</td>
</tr>
<tr>
<td><strong>Capacity to pay</strong></td>
<td>Low &amp; seasonal</td>
<td>homogeneous among people</td>
<td>Large variation between people</td>
</tr>
</tbody>
</table>
Small rural towns in Cambodia and Laos

Smau Kney, Cambodia

Meuang Feuang, Laos

Water cart

Micro piping

open well

Bad water situation
1. Providers’ relationship with local authorities

2. Financial framework

3. Regulatory Framework

4. Skills and Capacity
Relationship with authorities and regulation
General frame

Technical Ministries

Specifications

Provincial government

Information

National Regulator

Planning, Technical support, Validation

Monitoring

Local government

Contract

Private entrepreneurs

Users

Local water committee

Regulation by contracts:

- Is adapted to numerous small systems
- Take in account the water context
- Favor local negotiation
MIREP contracts

**Management:** when private sector cannot take any investment or commercial risks

**Leasing:** A simple way of delegating the management of existing public assets

**Concession:** simple concept, complex contracting, quite risked for local entrepreneurs

**Privatization:** most secure (for investors) and easiest model in absence of local public commitment

**MIREP contract models**

- Leasing: 6%
- Management: 6%
- Concession: 19%
- Privatisation: 69%

**Simple contracts,**

- In local language,
- Durations allow financial returns,
- Allocated to individual or companies,
- Obligation of means and results,
- Validation at provincial, national levels.
Possible institutional barriers

– Lack of regulations on PPI (private participation in infrastructure),
– Lack of clear responsibilities about small towns water supply (grey area)
– Conflicting rules regarding the role of central and local governments in water regulation
– Lack of understanding about monopoly (these countries have recently adopted market economy)
– Weaknesses of local governments -> very important role of intermediary (provincial) levels
Financial framework

Maximize private investment,
Best leverage public funds
Decentralized financial framework

- Subsidy Funds
- Provincial government
- Local gov.
- Refinancing and guarantee fund
- Commercial Bank
- Private investor
- Connection fees
- Piped water system
- Users

Project support

GRET
### Subsidies: decrease tariff, improve access

<table>
<thead>
<tr>
<th>Mode</th>
<th>Basis</th>
<th>Allocation</th>
<th>Recipient</th>
<th>Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input based</td>
<td>Treatment plant</td>
<td>By bidding</td>
<td>Builder</td>
<td>Infrastructure progress</td>
</tr>
<tr>
<td></td>
<td>~30% of the network</td>
<td>By bidding</td>
<td>Investor</td>
<td>Infrastructure progress</td>
</tr>
<tr>
<td>Output based</td>
<td>Subsidize access for Poor HH</td>
<td>Real cost; (connections or Standpipe)</td>
<td>Investor</td>
<td>Connection progress</td>
</tr>
</tbody>
</table>

- **Reduces the capital barrier for local entrepreneurs**
Credit scheme (MIREP Cambodia)

**MIREP Programme**

- Rural Infrastructure Funds (RIF)
- Information
- Help business plan
- Private entrepreneur

**Public bank**

- Possible refinancing (3 to 5 years) Guarantee 30%

**Commercial bank**

- Better rate (14% instead of 20%)
- Longer duration (3 to 5 years)
- Less collateral

**Commercial bank: increased confidence**

- Guarantee level
Investment breakdown

Investment in MIREP Cambodian projects

- Private investment: 56%
- Subsidies: 33%
- Credit: 7%
- Public investment: 4%

System average investment: $45,000 ($150 / Household)

Private sector investment / subsidies = 2 / 1
Skills and capacities

Local entrepreneurs are suitable for small rural town water supply
## Typology of entrepreneurs

<table>
<thead>
<tr>
<th>Features</th>
<th>Reasons</th>
<th>Practices</th>
<th>Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Resident entrepreneurs</strong></td>
<td>Individual with limited financing capacity, Already often in water business</td>
<td>Long lasting revenues, Way of saving Social recognition</td>
<td>Finance, build and operate step by step</td>
</tr>
<tr>
<td><strong>Many in Cambodia</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Few in Laos</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Regional Developers</strong></td>
<td>Individual / Cies with medium financial capacity, Invest within an region where they have links, Able to replicate</td>
<td>Financial returns, Social recognition</td>
<td>Finance Delegate construction and management to employees</td>
</tr>
<tr>
<td><strong>Experienced water companies</strong></td>
<td>National companies, able to mobilize high level financing or competences</td>
<td>Financial returns</td>
<td>The company takes all in charge</td>
</tr>
</tbody>
</table>
Characteristics of private sector

- Expertise
- Social links
- Investment

- Experienced
- Developers
- Residents
2 examples of private entrepreneurs

Dr. Maysi, investor in Tha Heua, Laos

Regional developer profile

Mr. Kol Bol, Tram Knar, Cambodia

Resident profile
## Recommendations of approach

<table>
<thead>
<tr>
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<th><strong>Developers</strong></th>
<th><strong>Experienced</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategy</strong></td>
<td>Adaptation</td>
<td>Attraction</td>
<td>Grouping</td>
</tr>
<tr>
<td><strong>Objective</strong></td>
<td>Help them to increase their technical and financial capacity with long lasting TA and financial support (3-5y)</td>
<td>Propose a turn-key project with a TA and financial package</td>
<td>Group several small towns, within a profitable package</td>
</tr>
<tr>
<td><strong>Selection</strong></td>
<td>Local agreement Bidding &amp; possible compensation if the resident is too weak</td>
<td>Bidding on tariffs or subsidies</td>
<td>Bidding</td>
</tr>
</tbody>
</table>
MIREP case

Investors in 16 small towns

- Developers replacing residents: 25%
- Residents: 37%
- Developers: 38%

No experienced company in MIREP, because projects are small and proposed individually.

Investment of residents has been increased by 4

Regional developers brought twice as much financing than residents.

Investment mobilized for 16 projects

- $360,000 to $450,000

- Residents: Existing $50,000, New $350,000
- Developers: Existing $500,000, New $950,000
Thank you

Groupe de Recherche et d’Echanges Technologiques

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