Capacity Building Workshop
Bangkok - Thailand

Performances Improvement

Phnom Penh’s Experience

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Land: 181,035 km²
Population: 13 millions

375 km²
1.3 Million
1993

- Over staff, not qualified, 22/1,000 connections
- Low salary, self interest, low discipline
- Very poor service, no clean water, 2m, <10 hr/day
- High NRW 72%, 1,945 public underground tanks
- Very low willingness to pay, collection <50% of 26,800 bill
- Heavy subsidy, >50% of operation cost
- No maintenance, no investment

Opportunities

- Different International Assistances: Japan, France, UNDP
- Loans available from WB, ADB
- New Leader

Need to Change or Die!

1. Policy: from Gov. Subsidy to Full Cost Recovery

2. Operation: from By Chance to Effective O&M
Since 2000:
- Service extension
- Social responsiveness
- Quality of service

PPWSA’s Ownership:
- Strong Leadership
- Example from the Top
- Commitment to Improve
- Effective Management
- Effective Investment
  - on Hardware
  - on Software
PPWSA’s Ownership ...

- Effective O & M
  - Maximum Billing
    - Computerized Customers Management & Billing System
    - Surveying & Updating Customers File
    - Proper Water Meter Reading
  - Maximum Collection
    - Disconnection of Late Payment
    - Dept monitoring
- Maximize NRW
  - 24hrs Leak Repair Team
  - Active Detection of Leak & Illegal Use
  - Regular Meters Maintenance & Replacement

Minimizing NRW Rate
Maximizing Billing Ratio

[Bar chart showing NRW rate from 1993 to 2005]
### The Differences

<table>
<thead>
<tr>
<th></th>
<th>1993</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>10hr/d</td>
<td>24hr/d</td>
</tr>
<tr>
<td>Pressure</td>
<td>2 m</td>
<td>25 m</td>
</tr>
<tr>
<td>Coverage area</td>
<td>25%</td>
<td>95%</td>
</tr>
<tr>
<td>Connections</td>
<td>26,881</td>
<td>138,000</td>
</tr>
<tr>
<td>Network</td>
<td>280km (old)</td>
<td>1.230km (new)</td>
</tr>
<tr>
<td>Production</td>
<td>65,000m³/d</td>
<td>235,000m³/d</td>
</tr>
<tr>
<td>NRW</td>
<td>72%</td>
<td>11%</td>
</tr>
<tr>
<td>Metering</td>
<td>12%</td>
<td>100%</td>
</tr>
<tr>
<td>Collection ratio</td>
<td>48%</td>
<td>100%</td>
</tr>
<tr>
<td>Operating ratio</td>
<td>200%</td>
<td>28%</td>
</tr>
<tr>
<td>Staff/1,000 Connections</td>
<td>22</td>
<td>4</td>
</tr>
</tbody>
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### Dream become true

**Water for the Poor**

- Find Out the Poor & Poor Communities
- Consultation with the Poor
- Broadcasting of Supply Policy:
  - Low Cost for Basic Need
  - Installment Payment
    - 10, 15, 20 month (1998)
  - Same Quality of Service
  - 30%, 50%, 70%, 100% subsidy for the poorest (2005)
1. 5 to 10 times cheaper. Savings round 300,000 Riels (USD75) /Family/Year

2. Alleviate Burden of Women & Children

3. Health Improvement by Quality

Supply Area in 2005 and 2020
LESSONS learned

- Political will
- Preparation for Autonomy
  - Strong Leadership (proactive)
  - Restructure of the Organization (appropriate)
  - Qualified Personal with Discipline (HRD&M)
  - Clear & Reasonable Policies, Roles, Regulations, Standards (with Monitoring)
  - Effective Operation & Maintenance
  - Efficient Investment
- Full Autonomy (commercial basis)
- Willingness to Pay, (Gov. Customers, too)
- Good Partnership (national & inter.)

Thank you for your attention