Commercialization of Afghanistan Water and Sanitation Activity

CAWSA

Corporatizing Municipal Water Supply Departments as Strategic Business Units (SBUs)

Presenter: Rohullah Aminzai
Chief of Party, ICMA/CAWSA
CAWSA Program Overview

Cooperative Agreement Amount
Approx. $8.5 million
including $800,000 in SBU grants

Period of Performance
Nov. 2008 to Nov. 2011 (3 years)

In-Country Expatriate Staff
Chief of Party: Rohullah Aminzai
E-mail: raminzai@icma.org
Phone: + 93 797 367 459
Deputy CoP: Robert Katz

Local National Staff
Local professional staff: 31
Support staff: 10

Program Locations

City         Province
Mazar-e-Sharif  Balkh
Jalalabad     Nangarhar
Gardez       Paktya
Ghazni City  Ghazni
CAWSA Implementation Accomplishments are Linked to Successful Program Design

CAWSA:
• Is in response to direct MoUD requests through donor coordination meetings

• Supports the implementation of MoUD’s Institutional Development Plan

• Is fully coordinated with other donors’ sector activities

• Supports the WSS reforms of the Afghan Government (GIRoA)
An Overview of the Water Sector in Afghanistan

Governance:
- Central Authority for Water Supply and Sewerage (CAWSS) was responsible for piped Water Supply and Sanitation (WSS)
- In practice – covered water only, not sanitation
- Centralized authority under Ministry of Urban Development (MoUD)
- No separation of policy, supervision, and operations
- Jurisdictional overlap: MoUD, municipalities, Ministry of Energy and Water (MEW)

In late 2005/early 2006 the Afghan Government announced:
- Urban WSS sector policy
- Urban WSS Institutional Development Plan
- Corporatization of CAWSS to AUWSSC (Afghan Urban Water Supply and Sewerage Company)

To channel donor efforts in this sector, MoUD prepared:
- Short Term Plan 2005 – 06
- Medium Term Plan 2007-11
Afghanistan: Poor quality WSS services due to:

- Conflict
- Drought
- Lack of investment
- Rapid urban growth
- Lack of management skills
- Low capacity of work force

Overall in Afghanistan:

- 13 out of 34 towns with population of 0.5 to 1.0 million have piped WSS.

- Access to piped water is 18%, among the lowest in the world.

- Sewerage system serves only a few apartment complexes in Kabul, covering less than 2% of its population.
### Baseline Indicators for CAWSA-supported Strategic Business Units (SBUs)

<table>
<thead>
<tr>
<th>Description</th>
<th>Jalalabad</th>
<th>Mazar-e-Sharif</th>
<th>Ghazni</th>
<th>Gardez</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Coverage %</td>
<td>28%</td>
<td>48%</td>
<td>38%</td>
<td>26%</td>
</tr>
<tr>
<td>Service Area Coverage %</td>
<td>17%</td>
<td>78%</td>
<td>35%</td>
<td>25%</td>
</tr>
<tr>
<td>Cost Recovery Ratio %</td>
<td>32%</td>
<td>39%</td>
<td>42%</td>
<td>32%</td>
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</tbody>
</table>
CAWSA Goals and Objectives

• Establish a viable business model for local urban water supply and sanitation service delivery (Mazar, Jalalabad, Gardez, Ghazni)

• Improve corporate performance to improve customer service

• Improve commercial performance to enhance financial strength

• Identify potential new services and commercial activities that will enhance revenues and improve financial strength

• Help the SBUs to embark on a trajectory that will allow them to collect sufficient revenues to finance up to 85% of their optimal life-cycle maintenance and operations cost
CAWSA Supports the SBUs by:

• Providing assistance in drafting, negotiating, signing and implementation of Statement of Goals and Memoranda of Understanding (MoUs) between each SBU and AUWSSC

• Improving commercial, technical and financial capacities of all four SBUs

• Providing on-the-job and classroom training for SBU management and staff

• Planning and implementation of grant-funded capital improvement projects (by both USAID and other donors) and performance incentive programs that contribute significantly to the capacity and financial sustainability of the SBUs
MoUs Define Relationship Between SBUs and AUWSSC:

- Outlines strategic goals and policies as set by AUWSSC
- Becomes a management tool to achieve AUWSSC’s goals
- Identifies performance indicators
  - Commercial
  - Financial
  - Technical
- Sets realistic goals for SBUs to achieve
- Delineates AUWSSC’s & the SBU’s responsibility in capital improvement projects (CIPs)
- Outlines goals for SBUs and the necessary reporting needed back to AUWSSC
- Becomes a basic business plan over time
## Strengthen the Management and Operation of SBU Community Water Systems

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Indicator Definition and Unit of Measurement</th>
<th>Method/Approach of Data Collection or Calculation</th>
<th>Baseline Information</th>
<th>Performance Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Recovery Ratio</td>
<td>% - Total value of revenues collected divided by operating and maintenance expenses</td>
<td>SBU billing data base and financial reports – will be verified and upgraded</td>
<td>Baseline information has been established for each SBU</td>
<td>Initial targets are set for each SBU and will be adjusted periodically as project progresses</td>
</tr>
<tr>
<td>On-Time Collections</td>
<td>% - # of on-time collections divided by total # billed monthly</td>
<td>SBU results will be disaggregated by customer type</td>
<td>Baseline information has been established for each SBU</td>
<td>Initial targets are set for each SBU and will be adjusted periodically as project progresses</td>
</tr>
<tr>
<td>MOU Performance Index (MOUPI)</td>
<td>Score on an index of good management principles and water service best practices</td>
<td>CAWSA has developed an index of management and best practices. Each SBU will be evaluated against its own target in each management area.</td>
<td>Baseline information was collected in initial assessments for each SBU</td>
<td>Initial targets are set for each SBU and will be adjusted periodically as project progresses</td>
</tr>
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<td>Performance Indicator</td>
<td>Indicator Definition and Unit of Measurement</td>
<td>Method/Approach of Data Collection or Calculation</td>
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<td>Performance Targets</td>
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<tr>
<td>--------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>% of Service Area Coverage</td>
<td>Number of service connections divided by total potential customers in the community (households, businesses)</td>
<td>Total number of bills issued by type-residential vs. business accounts + # residential households divided by # of residential and business structures in the community</td>
<td>SBU billing records + population data collected during initial assessment</td>
<td>Initial targets are set for each SBU and will be adjusted periodically as project progresses</td>
</tr>
<tr>
<td>Population Coverage (%)</td>
<td>Residential population served divided by total resident population X 100</td>
<td>Population of the area for which the water infrastructure is designed</td>
<td>SBU billing records + population data collected during initial assessment</td>
<td>Initial targets are set for each SBU and will be adjusted periodically as project progresses</td>
</tr>
<tr>
<td>Quality of Water Delivered to Utility Customers</td>
<td>Total number of tests complying with standards divided by total number of tests carried out (monthly)</td>
<td>Water quality based on microbiological, physical and chemical tests</td>
<td>Current testing practices can be used to begin, but testing practices will be improved</td>
<td>The target for each SBU will be set within its own MOUPI. The program will not set an overall target for this indicator.</td>
</tr>
<tr>
<td>Continuity of Water Supply</td>
<td>(% Hrs of service/24 Hr X 100 Hours of service provided per customer per day</td>
<td>Hours per day of water availability at specified locations</td>
<td>Hours of service at source available now. Improved baseline is being developed</td>
<td>Initial targets are set for each SBU and will be adjusted periodically as project progresses.</td>
</tr>
<tr>
<td>Water Loss (%) (Unaccounted for Water)</td>
<td>(M³ produced minus M³ billed) divided by M³ produced X 100</td>
<td>Once meters are procured and installed, this measure can be taken</td>
<td>This indicator depends on external support for meter acquisition (outside CAWSA control)</td>
<td>The target for each SBU will be set within its own MOUPI. The program will not set an overall target for this indicator.</td>
</tr>
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</table>
CAWSA Methodology

- Establish a cadre of professionals in each SBU
  - Implement technical assistance, on-the-job (OJT) & formal training
  - Implement MIS and financial reporting systems
  - Update job descriptions, employee qualifications, and HR database

- Implement systems improvements – commercial & technical procedures
  - Implement efficient operating procedures to reduce unit costs
  - Standardize systems for improved customer service and optimal performance
  - Improve work planning & implement performance budgeting techniques

- Implement an MoU - Initial Business Plan for each SBU
  - Establish technical and commercial performance targets
  - Require SBU system improvements and performance improvements
  - Perform objective management audits and analysis of results
  - Establish a quantitative incentive scheme to reward SBU employees who achieve targets
CAWSA’s Commercial/Financial Interventions:

• Provide commercial management training & motivational mentoring
• Strengthen the financial accounting process through the installation of a computerized accounting system
• Install a computerized inventory system
• Strengthen the customer management and revenue collection processes
• Improve SBU communications (public awareness campaigns, etc.)
• Set up a proper customer care center
• Develop human resources management practices
• Build a case for revised tariffs through detailed study of actual costs of service
CAWSA’s Technical Interventions:

- Design and implement SBU preventive maintenance programs
- Develop a water loss reduction approach, with a leak detection team, and collect information on pressure and flows in order to manage these to reduce losses
- Develop full operating manuals and procedures for all SBU plant and equipment resources
- Equip SBU maintenance sections with the necessary tools and facilities
- Develop a meter management plan
- Improve water quality management, through enhanced sampling procedures, staff training, and the installation of new water quality laboratories

An existing pump station
Expatriate Subject Matter Experts (SMEs) → Afghan Program Staff (Kabul HQ) → Embedded Afghan Staff in Each SBU

- Commercial
- Financial
- Technical

- Sr. Commercial Advisor
- Sr. Financial Advisor
- Sr. Technical Advisor

- CAWSA Team Leader
- Utility Mgt. Advisor
- Water Utility System Eng.
Capacity Building in SBU Achieved by:

- Classroom trainings in:
  - Customer relations
  - Finance
  - Administration
  - Technical operations
  - Management

- On-the-job training in above areas by embedded local national advisors in SBU offices

- Study tours (domestic and international/regional) for SBU staff

- SBU staff exchange visits to learn from each other’s experiences across Afghanistan
Commercial Improvements:

- Assessing current commercial practices
- Improve corporate efficiency and commercial performance
- Enhance revenues by expanding commercial services
- Institutionalize operational changes necessary to enhance customer services
- Develop and present innovative corporate commercial policy proposals
Developing Customer Complaint Tracking & Response Systems

Existing customer complaint tracking records are rarely answered

New CAWSA-designed complaint tracking system

<table>
<thead>
<tr>
<th>Date</th>
<th>Outcome</th>
<th>Investigated</th>
<th>Received</th>
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<td>6-2-1358</td>
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</table>
Computerizing Well Water Production Tracking System

Previous well production records (only 8 entries recorded for 30 days of production)

New CAWSA-designed computerized well water production records support advanced monitoring and control systems.
Developed/Proposed Financial Improvement Tools

Previous ledger and billing records

Current cash flow and transaction based accounting
Developed/Proposed Financial Improvement Tools (cont.)

Computerized Cost Recovery Ratio Calculation
Improvements of SBU Administrative Procedures

- Prepare organizational chart & staff job descriptions for each SBU
- Improve filing systems
- Develop Human Resource Information & Management System (HRIMS)
- Design HR forms
  - Leave tracking
  - Leave request
  - Performance appraisal
  - Purchase request
  - Vehicle/generators log

Up & Lower Left: Existing HR files
Lower Right: CAWSA-developed & proposed HRIMS
HR & Admin Tools Developed/Proposed By CAWSA

Purchase Request Form

Leave Request Form
SBU Proposed MIS

HRMIS

ICMA Main Database

Inventories

Cost Recovery Ratio

Backup Data

Complaints Handling Sys.

Database Print Outs
**Infrastructure and O&M Improvement**

- Demand-driven projects – SBU managers set priorities in cooperation with citizenry and request CAWSA grant or other donor funding as needed
- Emphasis on projects that facilitate private sector growth and future SBU revenue enhancement
- Emergency infrastructure rehabilitation and repair
- CAWSA leverages resources of other donors to enhance program impact
- Undertake projects that enhance the efficiency of infrastructure investment made previously by USAID and others
- Collaborate with new USAID municipal program on future USAID WSS investments and O&M
CAWSA has limited grant funds for infrastructure components. CAWSA is mitigating this by leveraging other donor funds.

CAWSA is leveraging funds from PRTs, ICRC, UN-Habitat and other donors to satisfy rehabilitation demands and needed extension of water infrastructure in all four SBUs.

CAWSA identified CIPs funded by CAWSA grants, PRT, WB, ICRC, CADG & others.
CAWSA will reduce the current water loss (over 60%) through:

- Improved source metering
- Water loss assessment
- Reducing unauthorized consumption
- Proactive leak detection and repair
- Water pressure management

CAWSA embedded advisor oversees leak repair in Ghazni

Over 60% of piped water is lost through system leakages
**PRT Relationships**

- Mutually supportive relationship with PRTs
- Recognizes and respects PRT’s role and territorial jurisdiction
- Independent operation with minimal direct contact or identification with PRT and ISAF forces
- Point of contact with PRT is local USAID FPO
- Vehicle for implementation of PRT’s strategic initiatives – with joint funding opportunities for infrastructure improvements
Challenges

- Limited project infrastructure improvement funds
- Delays in AUWSSC corporatization and its recruitment of a Senior Management Team to sign the AUWSSC MoU with the SBUs and appoint new SBU directors
- Delay in World Bank support to AUWSSC requires CAWSA to provide a full-time engineer to assist the CEO and board of directors while meeting all SBU goals outlined in the cooperative agreement
- SBU progress exceeds AUWSSC’s board of directors’ capacity to monitor, prioritize and manage operations. This will be complicated by future training demands when new SBU directors are recruited.
- The increased insurgency and criminal activity that has resulted in increased project security costs.
- Limited provincial accommodations for CAWSA’s expatriate SME consultants traveling to SBUs (i.e., within PRTs, secure in-town accommodations) results in cancellation and delay of assessment and training missions.
A scene from the old city of Ghazni, a CAWSA infrastructure project target area.