Outcome-Based M&E

Using the Water Service Level Ladder Framework in the MWA – Latin America Program

“Water Links” or “Lazos de Agua”
What is Lazos de Agua?

- Lazos de Agua is a joint partnership between MWA, Coca-Cola Latin America, and the FEMSA Foundation

- $12.3 million over three years (2012-2015)

- 5 countries, 6 Implementing partners, Common Implementation Strategy & MEL Framework
  - Living Water International – Mexico
  - World Vision – Mexico
  - CARE – Guatemala
  - Water for People – Honduras
  - WaterAid – Nicaragua
  - Aguayuda - Colombia
Program Objectives

Project Objectives:

- Increase access to sustainable, safe water, sanitation and hygiene for a minimum of 110,000 people in the intervention communities
- Improve source and household level drinking water quality to meet or exceed national government standards in all water schemes constructed or rehabilitated through the program

Targets the most vulnerable, rural populations in 5 countries: Mexico, Guatemala, Honduras, Nicaragua, Colombia
**What is the Water Service Level Ladder?**

- Sector framework developed by WHO, refined by IRC
- “Service Levels” conceptualized as rungs on a ladder, based on 4 criteria

<table>
<thead>
<tr>
<th>Service level</th>
<th>Quantity (LPCD)</th>
<th>Quality</th>
<th>Accessibility (Distance to Source)</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>Greater than 100L</td>
<td>Exceeds WHO Standards</td>
<td>Multiple Taps Flowing Continuously</td>
<td>Very reliable (365 days of functionality)</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Greater than 50L</td>
<td>Meets WHO Standards</td>
<td>Less than 100m</td>
<td></td>
</tr>
<tr>
<td>Basic (normative)</td>
<td>Greater than 20L</td>
<td></td>
<td>100-1000m</td>
<td>95% Functionality</td>
</tr>
<tr>
<td>Sub-standard</td>
<td>Greater than 5L</td>
<td>Problematic</td>
<td>Greater than 1000m</td>
<td>Problematic</td>
</tr>
<tr>
<td>No service</td>
<td>Less than 5L</td>
<td>Significant Problems</td>
<td></td>
<td>Unreliable/ insecure</td>
</tr>
</tbody>
</table>

Service Level Ladder taken "as is" from the Lazos de Agua Baseline Report prepared by UNC.
How does the Service Level Ladder fit into MWA’s MEL Framework?

- Lazos MEL Framework is designed to capture appropriate indicators to test the theory that higher service levels impact sustainability, livelihoods, hygiene, health, etc...
- Testing this theory by gathering data on impact of providing different service levels, improving comparative analysis

<table>
<thead>
<tr>
<th>Partner</th>
<th>Country</th>
<th>Intervention</th>
<th>Service Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>CARE</td>
<td>Guatemala</td>
<td>Continuous on-premise, piped water systems</td>
<td>High</td>
</tr>
<tr>
<td>Water for People</td>
<td>Honduras</td>
<td>Continuous on-premise, piped water systems</td>
<td>High</td>
</tr>
<tr>
<td>World Vision</td>
<td>Mexico</td>
<td>20,000L Rainwater Harvesting Tanks @ household</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Living Water Int.</td>
<td>Mexico</td>
<td>Non-continuous on premise, Piped Water System Rehabs</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Living Water Int.</td>
<td>Mexico</td>
<td>Protected Spring Boxes, within 30 minutes walk</td>
<td>Basic</td>
</tr>
<tr>
<td>WaterAid</td>
<td>Nicaragua</td>
<td>4,000L Rainwater Harvesting Tanks @ household &amp; Shallow Wells with community waterpoint within 30 minutes walk</td>
<td>Basic</td>
</tr>
<tr>
<td>Aguayuda</td>
<td>Colombia</td>
<td>Shallow Wells with community waterpoint within 30 minutes walk</td>
<td>Basic</td>
</tr>
</tbody>
</table>
What were the service levels at baseline?

- Sample of 1009 households from 109 communities in 20 municipalities, 7 states, 5 countries
- Data collected from March-May 2013
- 2 surveys used: household survey & water point survey
- Sample size calculated by a two-sample T test of mean proportions from estimated WASH coverage to 100% at endline
- Random selection of households
- Data collected using Akvo FLOW on cellular telephones
Quantity (Water Used pppd)

RAINY SEASON:
- No service (<5L), 1%
- Sub-standard (5-20L), 2%
- Basic (21-50L), 9%
- Intermediate (51-100L), 26%

DRY SEASON:
- No service (<5L), 1%
- Sub-standard (5-20L), 2%
- Basic (21-50L), 6%
- Intermediate (51-100L), 23%
Accessibility (Distance to Source)

**RAINY SEASON**
- Sub-Standard (1000+m), 6%
- Basic (100-1000m), 42%
- Intermediate (1-99m), 23%

**DRY SEASON**
- Sub-Standard (1000+m), 8%
- Basic (100-1000m), 55%
- Intermediate (1-99m), 19%
Reliability (Water Point Functionality)

Data based upon answers to the question: “How many days has your primary water point been out of service in the past year?

- 0 days = High reliability
- 1-30 days = Int/basic reliability
- 30+ days = Sub-standard reliability
Quality

- Quality was not measured at baseline, but is being measured once interventions are implemented, in ongoing monitoring and will be monitored at endline.
What happened when Service Level Indicators were aggregated?

- High, 2%
- Intermediate, 13%
- Basic, 48%
- No Service, 1%
Why a Movement toward Service Levels?

- Water delivered as a sustainable service, not just about first time access or construction of schemes
  - Outputs: Access :: Outcomes: Service Levels
- Emphasizes the entire life-cycle of the investment and involvement of key stakeholders to ensure availability & sustainability
- Allows for a guided analysis of where and why failures occur, and steps toward resolution
- MWA moving toward measuring impact on service delivered not just output/access, looks at impacts of interventions over time
Monitoring, *Evaluation and Learning*:

- Research project in conjunction with Emory Center for Global Safe Water looking at if there is a link between service level and hand washing practice (more water, closer to the house = high rates of handwashing = another benefit of higher investment in service level)
- MWA moving from just doing projects to delivering service, looking at effects on:
  - Sustainability
  - Positive impacts on beneficiaries
  - Multiple uses and IWRM
  - Detailed assessment of failures
- MWA’s MEL System is constantly developing to capture key indicators that contribute to better understanding of the 4 service levels