Drinking Water Management in Turkey

Turkish Court of Accounts Performance Audit Report 2012
Presentation Framework

- Audit approach
- Audit findings and its impacts
- Lessons learned
Our work is designed from a bottom-up perspective that focuses on the needs and expectations of citizens besides a top-down perspective.
Our report is structured on three basic questions:

✓ Are the drinking water management activities planned in a healthy manner?

✓ Are the drinking water management activities being conducted in a cost effective way by proper authorization?

✓ Has an effective control mechanism for protection of drinking water quality and water resources been established?
Two institutions are basically authorized in the management of drinking water.

- **General Directorate of State Hydraulic Works (SHW)** *(Its budget is designated by central government)* is responsible for providing drinking water. It brings drinking water to municipal boundaries by constructing dams and water pipelines.

- **Municipalities** *(They prepare their own budget/special budget)* are responsible for the distribution of water through the drinking water supply network to settlements within the municipal boundaries.
**Water Leakage**

Table 1: Water Leakage Rates According to Municipality Types

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Total Water Given to the Network (m³/year)</th>
<th>Amount of Water Invoiced (m³/year)</th>
<th>Average Water Leakage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan Municipalities</td>
<td>2,541,196,410</td>
<td>1,324,162,971</td>
<td>47.89</td>
</tr>
<tr>
<td>Provincial Municipalities</td>
<td>902,830,335</td>
<td>354,615,754</td>
<td>60.72</td>
</tr>
<tr>
<td>Other municipalities</td>
<td>1,650,478,325</td>
<td>660,725,198</td>
<td>59.97</td>
</tr>
<tr>
<td>Total</td>
<td>5,094,505,070</td>
<td>2,339,503,923</td>
<td>54.08</td>
</tr>
</tbody>
</table>
The main problem is that the water loss in the distribution network are over 50%.

The municipalities are not willing to invest in the prevention of the losses in the water distribution network.

SHW does not take the water losses in the distribution network into account when planning the investments for the supply of water needs.

As a result; the lack of strategy to prevent water losses affects the health of SHW's investment decisions and priorities in a negative way.
Audit Impact

✔ Our audit findings show that prevention of water loss is a more cost-effective solution than supplying water from new water sources.

✔ Legislative regulations have come into force that ensure municipalities take necessary measures in order to decrease losses in drinking water networks.

✔ According to this regulation, municipalities are obliged to decrease the water loss rates to 30% at most within the first 5 years, and to 25% within the following 4 years.
Water management activities have transboundary environmental effects.

Common problems can be solved by common initiatives and efforts.

In this context;
Parallel/coordinated audits that are carried out by SAIs will contribute to informing parliaments by shedding light on these common problems and their solutions and also to promoting cooperation with respective countries.
✓ Benefiting from a citizen-focused / bottom-up audit perspective plays a crucial role in the success of the audits on subjects which are vital for citizens, humanity and next generations, such as “Water Management”.

Lessons Learned 2
Thank you for your patience