

ARAD Case Study

Meimei Hadarom

How its NRW has been reduced by 75%



At a glance

Organization: "Meimei Hadarom"
Agricultural Cooperative, Israel

- Manages 44 agricultural communities
- Annual water consumption: 20 million m³
- 13,000 water meters, residential and bulk
- Average annual consumption per meter: 1,538 m³

Solution Spotlight

- M Water Meters
- Octave Water Meters
- Dialog 3G AMI Fixed network

Critical Issues

- 8% Non Revenue Water
- Large number of unread meters
- Water theft
- Dissatisfied consumers



CityMind dashboard

Introduction

Meimei Hadarom Agricultural Cooperative Society, based in central Israel 20 kilometers south of Tel Aviv, is one of Israel's oldest and largest utilities. Established in 1968, it supplies water for both residential and agricultural purposes.

Meimei Hadarom provides services to 44 kibbutzim and agricultural communities. It purchases 20 million cubic meters a year, which is the equivalent of almost half of Tel Aviv's water consumption. The average annual consumption per meter in Meimei Hadarom is extremely high and stands at 1,538 m³, 30 times higher than Israel's average of 60 m³ / water meter).

"Today, thanks to Arad, we are updated on a day-to-day basis on water consumption, alerts, tampering and leaks, and can respond immediately to every problem that occurs"

Yoav Cohen, CEO

Meimei Hadarom was looking for a solution that would help reduce non-revenue water. The utility was seeking an overall solution that would enable accurate, fair billing, improved water management and provide data that would be used as the basis for future strategic planning. This included the need for real-time data on water consumption, i.e., statistical data that could be used to improve the decision-making process and would reduce the number of customer service calls and disputes.

Implementing an effective way to measure water consumption, detect leakage and encourage water savings is an integral part of Meimei Hadarom's strategic goals to secure cost-effective water resources in the long term. With the implementation of Arad's Multi-Jet and Octave water meters integrated with Arad's Dialog 3G system, Meimei Hadarom succeeded in substantially improving its water management abilities. The company can now remotely collect data on the water consumption of each customer and improve leakage detection, thus saving significant amounts of water and energy.

The overall operational effectiveness of Meimei Hadarom has significantly improved as the company has managed to substantially increase revenues, reduce the non-revenue water dramatically and improve its relationship with customers.

Aims

- Ensure accurate measurement and billing
- Minimize leaks
- Reduce non-revenue water
- Lower overall costs
- Increase revenues
- Improve customer service and customer satisfaction

Results

- Non Revenue Water dropped from 8% to 2%
- Lower labor costs
- Reduced maintenance costs
- Accurate billing
- Easy, remote reading
- Improved leakage detection
- Real-time data management
- Reduction in customer service calls and disputes



The Challenge

In an area which is dominated by both urban and rural communities and high levels of water consumption, Meimei Hadarom needed a solution that would allow it to accurately measure water consumption, improve leakage detection and support water, energy and money savings.

Meimei Hadarom faced some serious challenges, including a high percentage of water loss (8%), equal to more than 1.2 million m³ a year. In addition, it suffered from high levels of non-revenue water due to a high number of unread meters located in isolated, hardly accessible locations, and old meters which could not be found.

The utility also faced water theft and dissatisfied consumers who complained about the service level and low transparency.

Results

In 2006, Meimei Hadarom started to install Arad smart meters and systems. This included replacing the old, existing residential and bulk water meters with new Arad 3G AMR meters. The system was optimized, ensuring that the meter's size matched the actual usage, and oversized meters were replaced. The project included upgrading the overall water infrastructure and the replacement of old and unsuitable water pipes.

In addition, every community was divided into a few sub areas called DMA (District Metered Area). In each DMA, Arad's MDM software compared water consumption, as measured by the main meters, with consumption of sub meters. Once a difference was tracked, the system immediately alerted the control center.

To date, 37 villages and kibbutzim are using Arad's solution, and by 2014 the project will be completed. The project has resulted in a sharp rise in the corporation's revenues.

Water loss has dropped from 8% in 2006 to only 2% in 2012, which translates into overall savings of 1.2 million m³ a year. Implementing Arad's innovative fixed network solution has also led to an improvement in customer services and a sharp fall in the number of complaints.

“The service to end users has substantially improved since we introduced the new system. We have notified our clients about leakage in their homes that had previously gone unnoticed for months and years”

Yoav Cohen, CEO