Empowering African Water Management: The Impact of Technology and Innovation

Case Study analysis

What percentage of the world's population will face severe water shortages by 2040 if we don't act



a. 10% of the world (+- 800 million people)

b. 50% of the world (+- 4 billion people)

c. 25% of the world (+- 2 billion people)

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c. 25% of the world (+- 2 billion people)

Source: World Resources Institute (WRI) and UN Water reports.

How many additional people in Africa could have access to clean water by 2030 if we use smart water technology solutions?



a. 10 million people

b. 200 million people

c. 50 million people

a. 10 million people



c. 50 million people

Source: International Water Management Institute (IWMI) and African Development Bank (AfDB) reports.



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Urban Water Management in Tunisia and Jordan

Case Study analysis

CHALLENGES IN TUNISIA: TUNISIA, LIKE JORDAN, FACES SIGNIFICANT WATER LOSSES IN URBAN AREAS DUE TO AGING INFRASTRUCTURE AND LEAKS.

Jordan's Solution: Jordan utilized Schneider Electric's SCADA systems to monitor their water distribution network in realtime, reducing leaks and improving efficiency.

IMPACT in Jordan:

- 35% reduction in water lOSSES IN URBAN AREAS.
- 25% IMPROVEMENT IN WATER DISTRIBUTION EFFICIENCY.

HOW IT CAN HELP TUNISIA?

IMPLEMENTING A SIMILAR SCADA-BASED MONITORING SOLUTION IN TUNIS AND OTHER CITIES COULD REDUCE WATER LOSSES BY UP TO 30%, SECURING MORE WATER FOR URBAN RESIDENTS.



35% Water Loss Reduction in Jordan's Urban Areas



\$10 Million Saved Annually Through reduced water losses in Jordan's Urban Areas



Urban Water Management in Tunisia and Jordan

How does it work, and what benefits does it offer?

- Real-Time Monitoring.
- Automatic Leak Detection.
- Automated Alerts for Quick Response.
- Data Analytics for Optimization.
- Remote Control of the System.
- Efficiency and Cost Savings.



Agriculture in Tunisia and Morocco

Case Study analysis

CHALLENGES IN TUNISIA:

LIKE TUNISIA, MOROCCO FACES SIMILAR WEATHER CONDITIONS AND HAS STRUGGLED WITH WATER WASTAGE IN AGRICULTURE.

MOROCCO'S SOLUTION: SCHNEIDER ELECTRIC'S SMART IRRIGATION SYSTEMS USING ECOSTRUXURE™ TECHNOLOGY. IMPACT: 30% REDUCTION IN WATER USAGE, 20% INCREASE IN CROP YIELDS. THAT CAN IRRIGATE AROUND 40,000 HECTARES OF FARMLAND PER YEAR.

HOW IT CAN HELP TUNISIA:

IMPLEMENTING SIMILAR SYSTEMS IN TUNISIA'S AGRICULTURE COULD BOOST EFFICIENCY AND CROP PRODUCTION.



20% Increase in crop yields



30% Water Loss Reduction / Year (20,000,000 m³/year)



Provide Drinking Water for 5 Millions people / Year

Agriculture in Tunisia and Morocco

EcoStruxure[™] Smart Irrigation System in Morocco: How It Works

SMART AGRICULTURE TECHNOLOGY

- Sensors monitor soil moisture, weather, and crop needs in real-time.
- EcoStruxure[™] software analyzes data to predict optimal watering times.
- Automated system adjusts irrigation for precise water delivery.

Remote Management

• Farmers can remotely monitor and control irrigation using smartphones or computers.



IIoT EcoStruxure™ at WaterForce with Microsoft



Agriculture in Tunisia and Morocco

EcoStruxure™ Smart Irrigation System in Morocco: How It Works



Let's be Impact Makers ! Who act for sustainability, efficiency, and resiliency to create an energy future that works for everyone !