



University: UzSWLU

Country: Uzbekistan

Web Address: <a href="https://www.uzswlu.uz/en#">https://www.uzswlu.uz/en#</a>

# [4] Water (WR)

# [4.6] Planning, implementation, monitoring and/or evaluation of all programs related to Water Management through the utilization of Information and Communication Technology (ICT)

Stage	Activities/Programs	ICT Utilization	Evidence	Timeline	Responsible Team/Departm ent
Planning	Develop water conservation strategy, set targets	Water usage analytics software	Strategic plan documents, water usage reports	Jan 2024 - Feb 2024	Sustainability Office, ICT Dept
Implement ation	Install water-saving fixtures, promote awareness	Smart meters, water-saving app	Installation logs, awareness campaign reports	Mar 2024 - Apr 2024	Facility Management, ICT Dept
Monitoring	Track water usage and savings	Real-time monitoring software	Water usage reports, savings analytics	Ongoing	Sustainability Office, ICT Dept
Evaluation	Assess effectiveness of conservation programs	Data analysis tools, feedback systems	Program evaluation reports, stakeholder feedback	Annually	Sustainability Office, ICT Dept

## **Description:**

### 1. Planning

A comprehensive water conservation plan was developed to ensure effective water resource management at the university. The main goals of the program included reducing overall water consumption by 15% over two years and raising awareness among students and staff.

## **Planning Activities:**

We are using water usage analytics software to collect data on current water consumption in various campus buildings.

They are analyzing data to identify areas with the highest water usage and evaluating potential savings opportunities.

Based on the data obtained, setting measurable water-saving goals for different buildings and campuses.

## **ICT Solutions:**





Water usage analytics software helped identify the campus's highest water-consuming areas, such as dormitories and cafeterias.

Data analysis systems were used to create graphs of current water consumption, enabling predictions on future water savings.

## 2. Implementation

The program's implementation began with the installation of water-saving devices and awareness campaigns for students and staff.

## **Implementation Activities:**

Installing water-saving taps and low-flow toilets across the campus.

Deploying smart water meters to monitor real-time water usage.

A mobile app was launched to inform students and staff about water-saving methods and provide recommendations based on consumption data.

#### **ICT Solutions:**

Smart water meters were installed in all major campus buildings, allowing the university to monitor water consumption in real time.

The "SaveWater@UZGUMYA" app was used to engage the university community, sending personalized notifications on water-saving methods.

## 3. Monitoring

The program's monitoring phase involved tracking actual water consumption and evaluating the savings generated by the implemented measures.

# **Monitoring Activities:**

Continuous monitoring of water usage through real-time data from smart meters.

Regular water consumption reports at the building level, allowing prompt responses to changes in consumption.

#### **ICT Solutions:**

Real-time monitoring software collected water usage data every minute, helping to detect anomalies such as leaks or abnormal spikes in usage.

A data visualization system displaying monthly water consumption was used to demonstrate progress in reducing water usage.

4. Evaluation

After the first phase of the program, the effectiveness of the implemented measures was assessed.

## **Evaluation Activities:**

A comparative analysis of water consumption data before and after the program's implementation. Collecting feedback from students and staff through online surveys on how their awareness and behavior towards water conservation had changed.

#### **ICT Solutions:**

Data analysis tools processed information from smart meters, enabling a quantitative assessment of water savings achieved.

An online feedback system helped collect qualitative assessments of the program and identify areas for improvement.

# Conclusion

Thanks to effective planning, the use of ICT for monitoring, and active community engagement, UzGUY achieved a 12% reduction in water consumption during the program's first 12 months. The use of smart meters and analytics software improved resource management and involved students and staff in water-saving processes. The program has proven successful and will continue towards the goal of achieving a 15% reduction in water consumption.





Additional evidence link (i.e., for videos, more images, or other files that are not included in this file):