



## Template for Evidence(s) UI GreenMetric Questionnaire

University : Sisaket Rajabhat University  
Country : Thailand  
Web Address : [www.sskru.ac.th](http://www.sskru.ac.th)

### [4] Water (WR)

#### [4.7] Impact of Water Management programs in supporting the Sustainable Development Goals (SDGs)



Figure: Water management programs at Sisaket Rajabhat University supporting water conservation, efficient water use, and the Sustainable Development Goals (SDGs).



## Description:

The university has undertaken a wide range of water management programs that contribute significantly to the achievement of Sustainable Development Goals (SDGs). These initiatives reflect a strong institutional commitment to water conservation, sustainable utilization, pollution prevention, and climate resilience. Key programs include:

- Operation of **rainwater storage and water conservation reservoirs** with a total capacity of **480,000 liters** to collect and conserve water resources for campus use and reduce dependence on municipal water supplies.
- Development of **water absorption areas covering 284,057.36 m<sup>2</sup> (30.33% of total campus area)** to improve groundwater recharge, reduce runoff, and support natural water retention processes.
- Installation of **water-efficient appliances** across campus buildings, including water-saving faucets, sensor-operated automatic faucets, dual-flush toilets, low-water-use sanitary fixtures, and drip irrigation systems to reduce water consumption.
- Implementation of **water recycling systems** through wastewater treatment processes that enable treated water reuse for irrigating trees, landscaped areas, and agricultural activities within the **Khok Nong Na Project**.
- Establishment of **wastewater treatment systems**, including grease traps, microbial fermentation tanks, pond aeration systems, water circulation pipelines, and solar-powered floating water wheels to improve water quality and minimize pollution.
- Promotion of **treated water consumption and reuse practices**, where treated water is systematically used for landscape maintenance, agricultural activities, and green space management throughout the university.
- Application of **Information and Communication Technology (ICT)** through application-based water distribution and irrigation management systems to support efficient monitoring, planning, and operational management.
- Implementation of **water pollution prevention and control programs**, including regular water quality assessments and monitoring of wastewater discharge in compliance with environmental standards.
- Installation of an **Automatic Water Quality Monitoring Station at Huai Samran Stream**, in collaboration with the Regional Environmental Office 12 (Ubon Ratchathani) and the Sisaket Provincial Office of Natural Resources and Environment, for continuous monitoring of pH, dissolved oxygen, conductivity, turbidity, ammonia, and temperature.
- Development of collaborative water resource management initiatives with government agencies and external organizations to strengthen sustainable water management and environmental protection.

**These efforts directly support SDGs 2, 3, 4, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, and 17, and contribute indirectly to broader sustainability outcomes, including:**

- **SDG 2 – Zero Hunger:** Supporting agricultural activities and sustainable food production through efficient water management systems.
- **SDG 3 – Good Health and Well-being:** Supporting public health through access to clean and safe water systems.
- **SDG 4 – Quality Education:** Providing sustainable learning environments and practical learning opportunities related to water resource management.
- **SDG 6 – Clean Water and Sanitation:** Ensuring sustainable water conservation, treatment, and reuse practices.
- **SDG 7 – Affordable and Clean Energy:** Supporting renewable energy use through solar-powered water management technologies.
- **SDG 9 – Industry, Innovation and Infrastructure:** Implementing innovative water infrastructure and smart management technologies.
- **SDG 10 – Reduced Inequalities:** Providing equitable access to water resources and sustainable environmental services.
- **SDG 11 – Sustainable Cities and Communities:** Enhancing sustainable campus and community water management systems.
- **SDG 12 – Responsible Consumption and Production:** Promoting efficient and responsible use of water resources.
- **SDG 13 – Climate Action:** Strengthening climate resilience through adaptive water management practices.
- **SDG 14 – Life Below Water:** Preventing water pollution and protecting aquatic ecosystems.



- **SDG 15 – Life on Land:** Supporting ecosystem conservation and environmental protection.
- **SDG 16 – Peace, Justice and Strong Institutions:** Strengthening environmental governance through monitoring, policies, and evidence-based management systems.
- **SDG 17 – Partnerships for the Goals:** Strengthening collaboration with government agencies and external stakeholders for sustainable water management.

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