Template for Evidence(s)
UI GreenMetric Questionnaire

University : Sisaket Rajabhat University
Country : Thailand
Web Address : www.sskru.ac.th

[3] Waste (WS)

[3.18] Impact of Waste Management programs in supporting the Sustainable Development Goals (SDGs)



Figure: Waste management programs at Sisaket Rajabhat University supporting waste reduction, resource efficiency, and the Sustainable Development Goals (SDGs).

Description:

Sisaket Rajabhat University has implemented comprehensive waste management programs based on the principles of **Reduce, Reuse, and Recycle (3R)** to promote sustainable resource management, minimize waste generation, reduce environmental impacts, and strengthen environmental awareness among students, staff, and surrounding communities. The university integrates waste reduction, recycling systems, circular economy practices, hazardous waste treatment, and wastewater management into its campus sustainability strategy.

Key programs include:

• Implementation of a comprehensive **3R (Reduce, Reuse, Recycle) program**, including waste segregation, recycling activities, and awareness campaigns for students, staff, and local communities.
• Adoption of an **Electronic Document Management System (e-Document System)**, online meeting documents, double-sided printing, and online payslip systems to reduce paper consumption and support a paperless office policy.
• Promotion of **plastic reduction initiatives**, including reusable cups, reusable baskets, reduction of single-use plastic bags, and environmentally friendly alternatives.
• Implementation of the **Zero Waste Canteen Project**, promoting waste minimization, reusable food containers, and proper waste segregation within campus food service areas.
• Establishment of **waste segregation stations** for recyclable materials such as paper, plastic bottles, glass, and aluminum to improve recycling efficiency and reduce landfill disposal.
• Development of **organic waste treatment programs**, including composting systems and the **Green Cycle Project**, which converts fallen leaves and organic waste into high-quality compost under the **BCG (Bio-Circular-Green Economy) Model**.
• Utilization of **wood waste and agricultural residues** as clean biomass fuel to support renewable energy generation and resource recovery practices.
• Promotion of **upcycling initiatives**, including transforming scrap fabrics into brooches and accessories and converting recycled materials into educational learning media for schools and communities.
• Implementation of **hazardous waste management systems** for electronic waste, laboratory chemicals, infectious waste, and other toxic materials through controlled treatment procedures and partnerships with external organizations.
• Development of **wastewater treatment systems**, including microbial fermentation tanks, grease traps, aeration systems, solar-powered floating water wheels, and treated wastewater reuse for agricultural activities within the Khok Nong Na Project.
• Collaboration with **Sisaket Municipality, Sisaket Hospital, schools, and local communities** to strengthen sustainable waste management and environmental education.

These efforts directly support SDGs 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 15, 16, and 17, including:

• **SDG 2 – Zero Hunger:** Supporting sustainable agriculture through compost utilization and resource recovery.
• **SDG 3 – Good Health and Well-being:** Reducing pollution and improving environmental health.
• **SDG 4 – Quality Education:** Promoting environmental education and sustainability awareness.
• **SDG 6 – Clean Water and Sanitation:** Supporting wastewater treatment and water quality management.
• **SDG 7 – Affordable and Clean Energy:** Utilizing biomass as renewable energy.
• **SDG 8 – Decent Work and Economic Growth:** Creating community-based income opportunities through

upcycling activities.

• **SDG 9 – Industry, Innovation and Infrastructure:** Applying innovative waste and wastewater management systems.

• **SDG 10 – Reduced Inequalities:** Providing community participation and equal access to environmental programs.

• **SDG 11 – Sustainable Cities and Communities:** Reducing environmental impacts through sustainable waste management.

• **SDG 12 – Responsible Consumption and Production:** Promoting resource efficiency and circular economy principles.

• **SDG 13 – Climate Action:** Reducing greenhouse gas emissions through waste reduction and resource recovery.

• **SDG 15 – Life on Land:** Protecting terrestrial ecosystems through pollution prevention and conservation practices.

• **SDG 16 – Peace, Justice and Strong Institutions:** Strengthening institutional environmental governance and responsible waste management.

• **SDG 17 – Partnerships for the Goals:** Enhancing collaboration with communities and partner organizations.

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