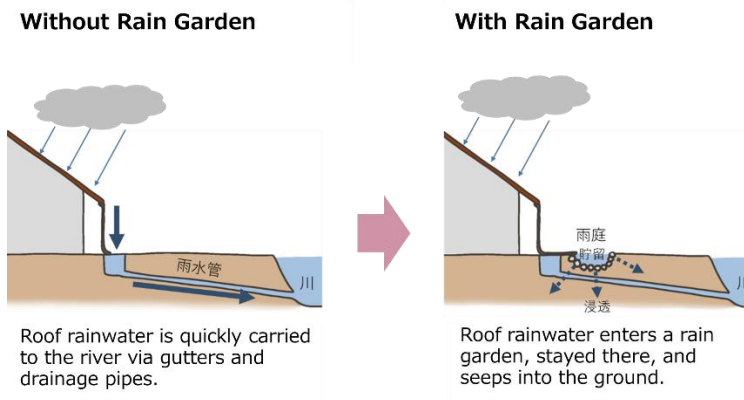


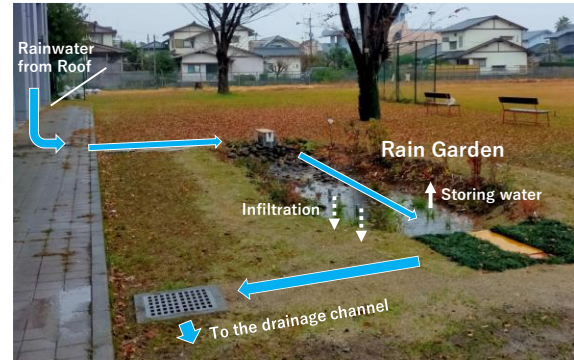
What is a Rain Garden?

A rain garden refers to a garden or space designed to temporarily store or infiltrate rainwater that falls on rooftops, asphalt, and other impermeable surfaces, rather than allowing it to flow directly into drainage channels or rivers.

(Image)



(Photo)



【Rain Gardens in the Kumamoto Area】

In Kumamoto, rainwater readily infiltrates rice fields called "Zaru-ta" (sieve fields) due to their high permeability, as well as agricultural land and grasslands, contributing to the formation of groundwater. However, with increasing urbanization, rainwater falling on roofs and asphalt surfaces now quickly runs off into sewers and rivers via gutters and drainage pipes, making it difficult for water to infiltrate into the ground. As a result, during heavy rainfall, large amounts of rainwater are funneled into drainage systems and rivers; if these cannot accommodate the volume, water can overflow onto the surface.

In contrast, rain gardens offer an effective countermeasure. By temporarily collecting rainwater from rooftops in depressions or allowing it to infiltrate the soil, rain gardens help recharge groundwater. Rain that seeps into the ground contributes to the formation of groundwater and spring water, aiding in the development of a sustainable water cycle. Furthermore, rain gardens can help mitigate flooding by reducing both the volume and speed of rainwater runoff into rivers and sewer systems. By installing rain gardens throughout different parts of a river basin, a sustainable and resilient water cycle is expected.

Additionally, by planting native species, rain gardens create habitats for wildlife, helping to conserve biodiversity and prevent the deterioration of natural ecosystems even as urbanization progresses. Rain gardens also fulfill multiple functions, such as mitigating the heat island effect. By increasing green-rich rain gardens and managing them collectively as a community, they provide opportunities for interaction across generations and social backgrounds, contributing to the development of vibrant and lush community environments.

Figures and photographs are sourced from the Kumamoto Rain Garden Partnership website.