SDG 6



Indicator 6.5.4

Sustainable Water Extraction On Campus

Misr International University (MIU) has implemented sustainable water technologies on its campus. Specifically, the university has constructed infrastructure to extract and collect rainwater from building surfaces, effectively diverting it for use in landscape irrigation rather than allowing it to be wasted or burdening municipal sewage systems.

Sustainable Extraction Methodology	**Rainwater Harvesting** The primary sustainable extraction technology utilized by the university is a comprehensive rainwater harvesting system. The process involves the following stages: • **Extraction Source:** Water is extracted directly from natural precipitation collected on the rooftops of university buildings. • **Conveyance:** A specialized network of pipes transports the water from the rooftops into the campus drainage network. • **Collection:** The water flows into designated collection pits (cesspools) before being consolidated.

Infrastructure and Storage Capacity	The university has completed the construction of a dedicated rainwater drainage network to facilitate this process. • **Central Station:** The collected water is routed to a newly constructed collection station. • **Storage Capacity:** This station has a storage capacity of **100 m^3**. • **Utilization:** Once collected, the water is pumped directly from the station into the university's **irrigation network**, ensuring the water is recycled for maintaining campus greenery.
Environmental Context and Impact	The implementation of this extraction technology is particularly significant given the local environmental context. The Engineering Department notes the following regarding the scarcity of water sources in the region: Egypt is considered a country suffering from rainfall scarcity. It receives between 20 millimeters (0.79 inches) and 200 millimeters of average annual rainfall along the Mediterranean coast, with the rate dropping to nearly 0 millimeters in the central and southern parts of the country. Despite these low precipitation rates, the university's investment in capturing this resource demonstrates a strong commitment to maximizing sustainable water extraction opportunities.