University : Karunya University
Country : India
Web Address : www.karunya.edu

[4] Water (WR)

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

Rain Water harvesting structure

Rain Water harvesting structure

Water conservation Tank

Farm Pond

Wireless water level controller

Drip Irrigation for Coconut +Cocoa Intercropping

Karunya Institute of Technology and Sciences has established a variety of water conservation structures and measures to control the water over usage both inside the campus, hostels and also in farmlands.

- **Rooftop rainwater harvesting systems and recharge wells**: 34 numbers of rooftop rain water harvesting systems and recharge wells have been established in the campus and in hostels. The water collected from the structures are used for irrigating the flora inside the campus purposes accounted for 86,237 m^3.
- **Ponds and Tanks:** Ponds and tanks conserve 14,334.17 m^3 of water and utilized for irrigation in the farm lands.
- **Water conservation through cultivation of rainfed crops:** Rainfed crops were cultivated in an area of 20 hectares and contributed an additional 1386880 m^3 to water conservation.
- **Recycled water:** 4 Sewage Treatment Plants and 4 biogas plants are functioning and 387,022 m^3 of water is recycled annually and used for gardening and non-potable usages.
- **IoT based water level controller for reducing the wastage:** IoT based flow meters are fixed in all the water outlet points and being monitered regularly.
- **Collaborative water management research and policy development** in partnership with SUEZ, Universities in Israel, Germany, Canada, Government Departments, Industries, NGOs, Research organisations and academic institutions.

The water conservation measures and efforts taken by the University support directly and indirectly to the following Sustainability Development Goals (SDGs):

- **SDG 1-** alleviating poverty through increased agricultural productivity
- **SDG 2-** Providing low priced agricultural inputs to farmers through innovations
- **SDG 3** – access to clean and safe water to the students
- **SDG 4** – Providing learning environments with reliable and sustainable water infrastructure
- **SDG 6** – Ensuring availability and sustainable management of water and sanitation for all
- **SDG 7** – Affordable and Clean energy
- **SDG 8** – Decent work and economic growth
- **SDG 9** – Implementing innovative water management infrastructure
- **SDG 11** – Enhancing urban resilience through sustainable water practices
- **SDG 12** – Encouraging responsible consumption of natural resources
- **SDG 13** – Mitigating climate impact through adaptive water strategies
- **SDG 14** – Preventing water pollution that impacts aquatic ecosystems
- **SDG 15** – Protecting terrestrial ecosystems through integrated water management
- **SDG 16** – Peace, justice and strong institutions
- **SDG 17** – Strengthening water-related partnerships for sustainable development

Additional Evidence:

Publications made by the Scientists of Karunya related to water conservation which supports the different SDGs