Youth Connect

Youth Community Resilience to Climate Change in the Mekong Delta (Y-CoRe)

The Application of Water Level Measurement and Warning Devices Combined with an Alternate Wetting and Drying System (AWD)

Project background

Agriculture plays a vital role in ensuring food security and economic development, especially in developing countries. However, this sector faces significant challenges, particularly water scarcity. In recent years, both the area and yield of rice crops in the Mekong Delta have been negatively affected. Therefore, effective water management in agriculture is a critical need.

Project objectives

- Integrate Internet of Things (IoT) into agriculture to help farmers optimise irrigation and drainage in their fields.
- Facilitate access to scientific irrigation technology and contribute to water-saving efforts in Kien Giang.
- Improve the capacity of local residents to operate automatic water pumping systems in the project area.
- Empower women and reduce gender inequality.

Project overview

The project provided a water level monitoring and warning system in Giong Rieng District, Kien Giang Province, to enable more effective agricultural water management compared to

traditional experience-based methods. In addition, the project built on existing resources and knowledge to save time, cost, and effort, thereby enabling further development and broader applicability.

Through training sessions on how to use and operate the system, the project empowered women, ensuring that not only husbands or those directly involved in farming but also wives and other family members can easily understand and use the monitoring system.

The system was installed and operated to ensure its reliability and practical feasibility. After installation, training sessions guided farmers in using the system. This helped farmers integrate information technology into rice farming, be more proactive in water management, and enhance their resilience to climate change, drought, and saltwater intrusion in the Mekong Delta.

Outstanding outcomes

One water level monitoring and warning system was integrated with an automatic water pump, operating effectively under the Alternate Wetting and Drying (AWD) technique in Kien Giang.

Additionally, one training session for local households on using IoT devices was held in Giong Rieng District, Kien Giang Province.

TEAM MEMBER'S INFORMATION

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