

# Young Scientist Research Project - Topic 4

Title

Water and nutrition management technology for vegetable farming

## ① Background Information

- **Personnel:** 1 person, A researcher from one of KAFACI member countries
- **Period of Training:** June 2020 ~ December 2020 (6 months)
- **Implementing Department:** Horticultural and Herbal Crop Environment Division, National Institute of Horticultural and Herbal Science
- **Research Studies Currently Being Implemented:**
  - Organic substrates utilization technology in order to alleviate soil salinization of greenhouse fruit vegetable
  - Development of sensor-utilized bio-information monitoring system for increasing nutrition and water efficiency

## ② Course Description

- **(Training Purpose)** Acquisition of fertigation and irrigation technology applicable to participating countries
  - \* Quantitative goal: Paper contribution on irrigation control technology using soil sensor (1), Paper submission (1)
- **(Professional capacity building)** Acquisition of basic technology for automated irrigation control
- **(Enhancement of self-learning)** Individual capacity building in vegetable farming based on soil characteristics and utilization of soil sensors
- **(Enhancement of on-the-spot problem solving ability)** Capacity building in application of irrigation system in accordance with soil and cultivating conditions
- **(Capacity building for future readiness)** Data analysis and its application

## ③ Qualifications of the Trainee

- **(General Requirements)**
  - A government official working in one of KAFACI member countries, and recommended by the head of his/her organization
  - Advanced degree at MSc. (or PhD) level; and at least 5 years of research experience
  - Proficiency in English, and computer applications and operations
- **(Specific Requirements)**
  - A person who has master's (or doctor's) expertise
    - \* Related Majors: majors related to Crop Cultivation such as Horticultural Science, and Soil Science
  - A researcher who is interested in application of automatic irrigation control technology
  - A person who is able to use statistical analysis software (R, SAS, SPSS, Stata)