COM-FSM Receives $199,750 USDA-NIFA Grant to Establish Yap's First Soil Testing Laboratory

The College of Micronesia-FSM has received a $199,750 grant from the U.S. Department of Agriculture's National Institute of Food and Agriculture (USDA-NIFA) to establish Yap State's first soil testing laboratory. The four-year project will renovate and equip the existing Agricultural Experiment Station Laboratory at the Cooperative Research and Extension (CRE) program, Yap Campus, bringing essential soil analytical services closer to the communities they serve.

Awarded through the Agriculture and Food Sciences Facilities and Equipment Program for Insular Areas, the grant invests in the College's capacity to connect agricultural research, education, and community outreach.

Healthy soil is essential to productive farms and reliable local food supplies. Yet farmers and agricultural researchers in Yap face challenges that include declining soil fertility, nutrient depletion, saltwater intrusion, erosion, and unpredictable rainfall. Farmers must currently send soil samples overseas for analysis, adding costs and delays that limit access to timely information.

The new laboratory will help address this gap by providing local testing of soil acidity, salinity, organic matter, and nutrients. These results will enable CRE researchers and extension agents to develop recommendations suited to local growing conditions and help farmers make better-informed decisions about fertilizer use, compost application, and soil improvement.

The facility will also strengthen research on root crops, cash crops, agroforestry, and organic soil amendments. By linking laboratory findings with field trials and farmers' experience, CRE will better serve farmers and identify practical approaches to improving crop production and maintaining soil health across Yap's island environments.

Students will benefit through hands-on training in soil analysis, sample handling, research methods, data management, and scientific reporting. These opportunities will connect classroom learning with agricultural challenges while developing skills relevant to careers in agriculture, natural resource management, and environmental services.

Implementation will proceed in stages, beginning with laboratory renovations and safety improvements, followed by equipment installation, staff training, and development of analytical and quality-control procedures. Pilot testing services will precede full integration into the College's research, extension, and student training programs.

Mr. Steven Young-Uhk, Vice President for Innovation and Sustainability, will serve as Project Director, overseeing administration, budget management, and project coordination. Dr. Murukesan Krishnapillai, Researcher and Extension Specialist at Yap Campus, will serve as Co-Project Director and Technical Lead, guiding equipment selection, analytical procedures, staff training, and research integration.

The initiative builds on earlier USDA-supported investments in CRE facilities and agricultural programs. Beyond the grant period, the College plans to sustain the laboratory through institutional support, integration with ongoing research and extension programs, and fee-based services for external clients.

By establishing a lasting soil testing resource in Yap, COM-FSM will strengthen its ability to turn scientific information into practical benefits for farmers, students, and food production throughout the FSM.



