

NIGERIA

Principal Investigator: Dr. Atanda Oladejo

Internship Title: Advancing indigenous fruits and vegetables production through climate-smart approaches in Nigeria.

Time Period: April 2025

Project Background: Nigeria, Africa's most populous country, has around 140 million youths, with nearly 60 million aged 15-24. However, many remain unemployed, especially among female gender. To address this, engaging youths in agriculture is crucial by enhancing their skills and opportunities using a value-chain and food-systems approach. Climate change further challenges sub-Saharan Africa, leading to diet shifts towards calorie-dense foods and increasing malnutrition. This is exacerbated by low soil fertility, outdated production methods, technological gaps, and youth indifference in agriculture. This project aims to empower youths, focusing on gender sensitivity, by promoting indigenous crop production. It will introduce innovative, climate-smart agronomic practices, soil amendments, and effective seed management, ultimately enhancing diet diversity, nutrition and reducing unemployment in Nigeria.



USAID
FROM THE AMERICAN PEOPLE

**HORTICULTURE
INNOVATION LAB**

UC DAVIS
UNIVERSITY OF CALIFORNIA

FAMU

FLORIDA
AGRICULTURAL AND
MECHANICAL
UNIVERSITY

Research Question(s) or Specific Issues to be Addressed	Acceptable Disciplines	Deliverables
<p>How do various soil amendments affect soil health, agronomic characteristics, and seed quality of selected indigenous fruits and vegetables? The fellow will gather data from the experimental sites located at the Obafemi Awolowo University Teaching and Research Farm in Ile-Ife, Nigeria, and /or from selected community and school gardens.</p>	<p>Agronomy Seed science Soil science with an interest in soil health/sustainable agriculture.</p>	<p>Collect data from the main experimental site and selected community and school gardens:</p> <ul style="list-style-type: none"> • Physical soil health indicators • Agronomic characteristics with view of identifying phenotypic responses to treatments • Seed quality of indigenous fruits and vegetables <p>Demonstrate to project participants how to assess:</p> <ul style="list-style-type: none"> • In-field physical soil health indicators • Specific tests such as water infiltration and aggregate stability <p>Review the significance and potential misuse of multivariate analysis in:</p> <ul style="list-style-type: none"> • Soil science-related research • Fruit and vegetable experiments <p>Analyze all collected data using:</p> <ul style="list-style-type: none"> • Appropriate statistical methods • Relevant software tools

